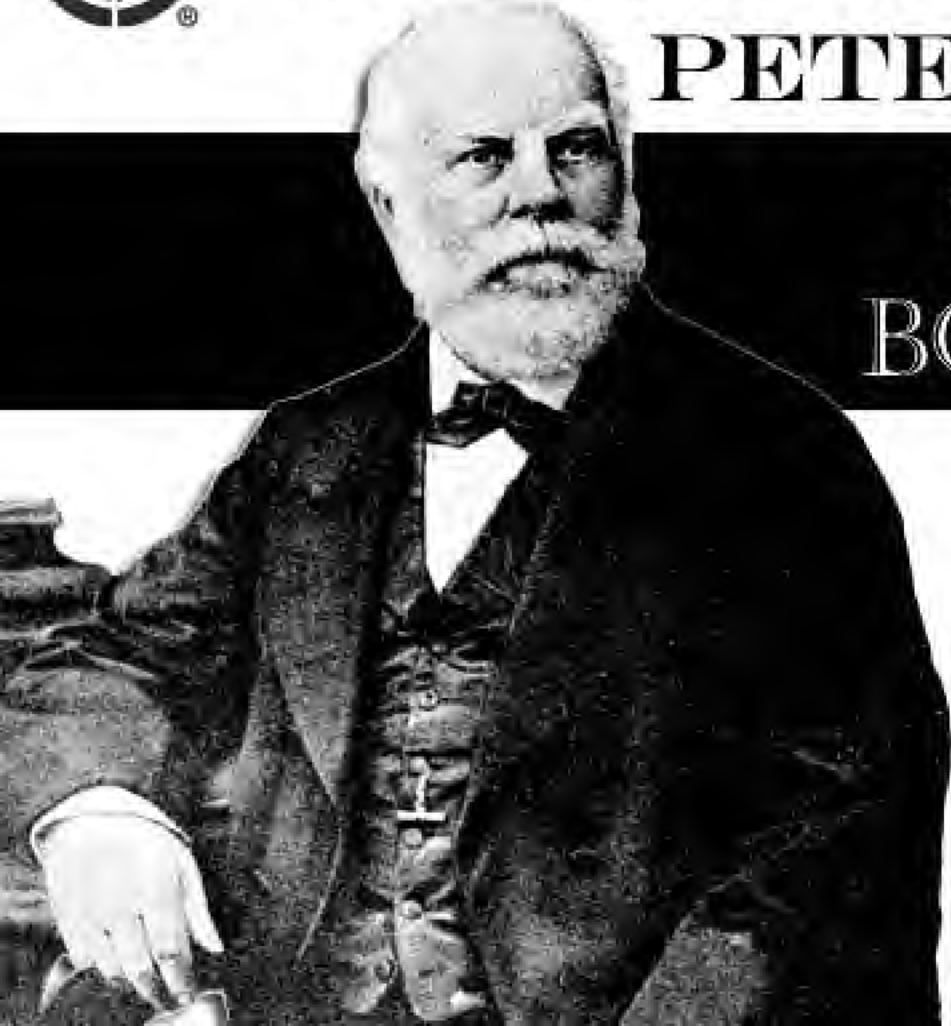
MISSOURI BOTANICAL GARDEN

PETER H. RAVEN LIBRARY

GEORGE ENGELMANN BOTANICAL NOTEBOOKS



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

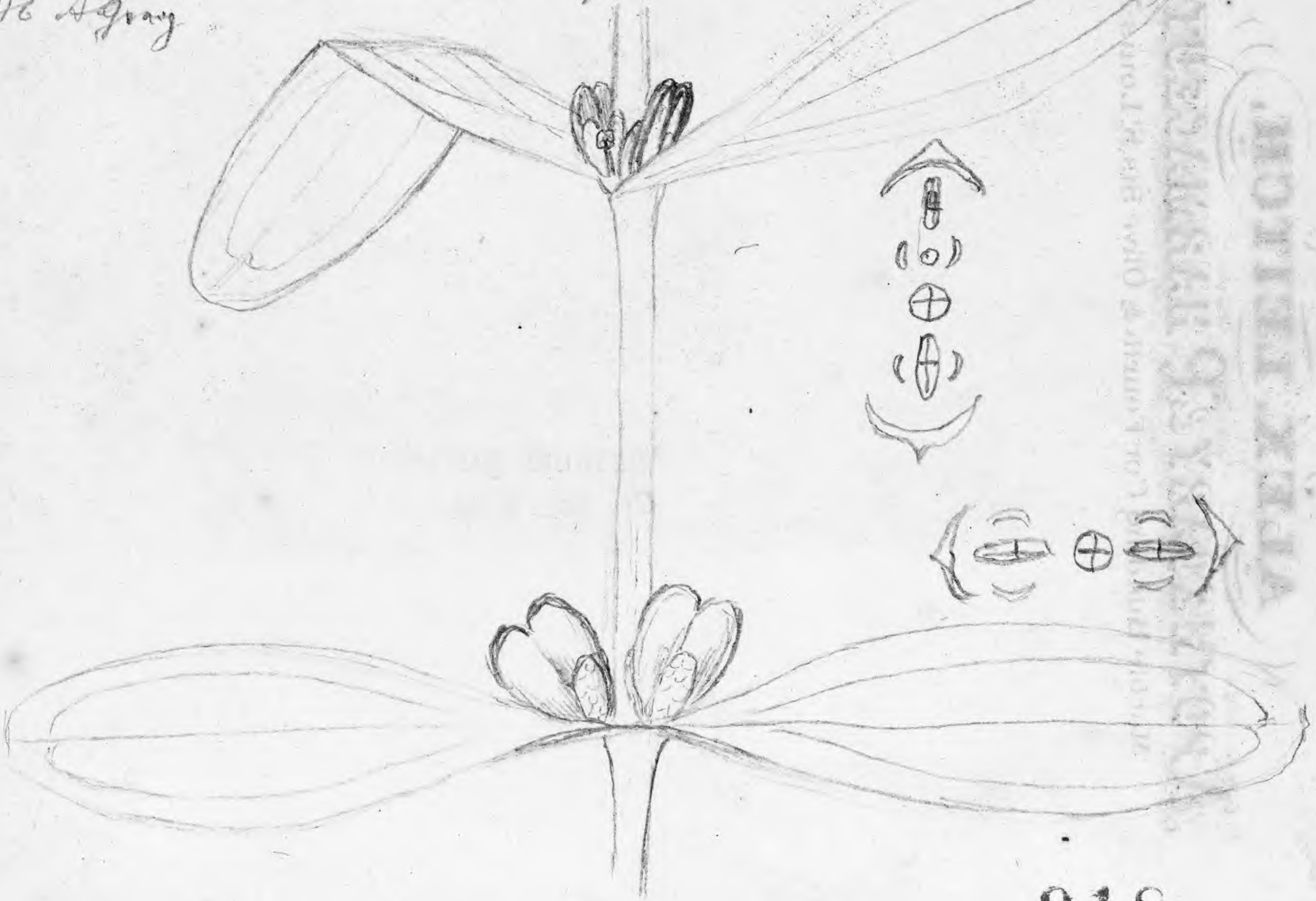
Sept 22 1864

Callitriche verna

sub nom C. autumnalis

Petersburg, Regel

in Hb A Gray



918

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
Missouri
Botanical
Garden

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

918A

so much interest among scientific men.* And such was his energy that, almost unaided, he gathered in a few weeks the extensive collection of fossil bones which furnished to Dr. Leidy the materials for his splendid memoir on the "Extinct Fossil Fauna of Nebraska." At the same time he collected a large and elegant series of Cretaceous fossils, some of which were described and figured by Dr. Owen in his final report on the Geology of Iowa, Wisconsin and Minnesota. The notes made by Dr. Evans on the geological features of that remarkable region were likewise of the highest interest, and from these Dr. Owen has compiled one of the most instructive and beautiful chapters to be found in his valuable report. In addition to his scientific duties, Dr. Evans had almost exclusive control of the business department of Dr. Owen's survey, which of itself involved an immense deal of labor. The satisfactory manner in which he discharged these onerous duties, often in the midst of disheartening privations and even danger, commanded the highest esteem and confidence of Dr. Owen and his associates, while his goodness of heart, uniform courtesy, and self-sacrificing disposition, secured to him their warmest friendship.

After the completion of the field work of the North-west Survey, (1850,) Dr. Evans received the appointment of U. S. Geologist for Oregon, which he accepted, and immediately entered upon the duties of his new office with his usual energy and zeal. The survey was organized by the appointment of Dr. B. F. Shumard to the position of Principal Assistant, who shortly after embarked for Oregon, by way of the Isthmus of Panama. Dr. Evans determined to revisit Nebraska, and thence proceed overland to Oregon by an unexplored route, with the view of determining the general geological and topographical features of a vast region, then almost unknown to science, and of ascertaining if there existed a nearer way from the Upper Missouri to the Oregon coast than that usually travelled. He proceeded to St. Louis, and there spent a few days in making preparations for his journey. He then took passage for Fort Pierre Chouteau, on board a steamer belonging to the American Fur Company. During this passage, which occupied nearly a month, cholera to an alarming extent prevailed among the passengers and employees of the Fur Company on board, several of whom died, and the mortality would have been far greater but for the kind attention of Dr. Evans, who, though himself laboring under an exhausting diarrhœa, allowed himself no rest, but in the triple capacity of physician, nurse and companion, was ever at the bed-side of the sick, administering to their wants, and encouraging them by his cheering words.

From Fort Pierre, Dr. Evans again visited the Mauvaises Terres, where in a short time he succeeded in obtaining a large collection of the fossil fauna of that region, even more extensive than his former one, and embracing a considerable number of new and interesting species. On his return to the Fort he set about preparing for his long journey, which from the hostility of the Blackfeet and other Indian tribes, together with the difficulties incident to the route, was regarded by the Indian traders as extremely hazardous; hence it was exceedingly difficult to find either guides or hunters willing to accompany him. After much persuasion, however, he succeeded in procuring the services of two hunters and a half-breed guide, they agreeing to go with him as far as the Flathead Village. With this meagre escort he started from Fort Pierre, but scarcely had he reached the borders of the Blackfeet country ere his hunters became alarmed, and unceremoniously left his camp during the night and returned to the Fort. Under these discouraging circumstances a person less courageous than Dr. Evans would have turned back; but difficulties served only to develope the indomitable

Callitriche verna
genuina
europaea
64-7

fruit
0.8 - 1.0 mm broad
1.0 - 1.2 high
0.9 - 1.1
1.0 - 1.2

---

* To Dr. Hiram A. Prout is justly due the credit of having first called attention to the existence of such remains in that region by his excellent memoirs of Palæotheroid and other bones, published in Silliman's Journal.

energy of his character, and with but a single man as his escort, and no other guide than his compass, he determined to continue on his course. After a wearisome travel of many days, and having encountered many privations and dangers, he and his companion, Cadotte, arrived safely, but in almost a starving condition, at the Flathead Village, situate on the western slope of the Rocky Mountains. In accomplishing this part of his arduous task, Dr. Evans passed directly through the heart of the Blackfeet country, and travelled a distance of more than two hundred miles in the main chain of the Rocky Mountains before he succeeded in finding a passage to the valley beyond. It is much to be regretted that the credit of the discovery of this important pass, which unquestionably belongs to the subject of the present sketch, has been unjustly transferred to another. It should have been named in honor of Dr. Evans instead of Cadotte, since it is well known that the latter person had no knowledge of such a passage, and, in fact, had not even been in that region before he went there under the guidance of Dr. Evans. After a few days' rest at the Flathead Village our traveller resumed his journey, and without encountering further difficulties, reached Oregon city with much valuable information concerning the extensive district of country through which he had passed.

In the prosecution of the geological survey of Oregon and Washington, Dr. Evans was actively engaged for nearly five years, during which period his travels extended over a large portion of those Territories. The results of his important labors, embracing a large amount of information relating to the geology, topography, geography and natural history of that interesting portion of the American continent, are embodied in his large report submitted to, and ordered to be printed by Congress at its last session. It was placed in the hands of the Public Printer only a few days previous to the death of its lamented author, and it is a matter of deep regret, that, owing to some informality, its publication must be delayed to await the further action of Congress. It is earnestly hoped that Congress will, at an early period, make the necessary provision for the printing of this important document, the preparation of which has cost such a large expenditure of labor and money, and which promises to be of the highest value to science and the people for whose benefit the survey was ordered.

September 2, 1861.

The President, Dr. Engelmann, in the chair.

Seven members present.

The following donation to the library was received: Bull. de la Soc. Imper. zool. d'Acclimatation, Paris, No. 7, Juillet, 1861, *from the Society.*

Mr. Holmes presented from Dr. B. F. Shumard the following skulls from Texas: *Felis pardalis*, Linn. (Tiger-cat), from Travis Co.; *Felis onza*, Linn. (Jaguar), from Hays Co., and *Dicotyles torquatus* (Peccary), from Travis Co.

Dr. Engelmann made some remarks on the temperature and humidity of the past three summer months. June and August were by more than two degrees warmer than the averages for these months, while July was cooler. The quantity of rain for each of these months was below the average

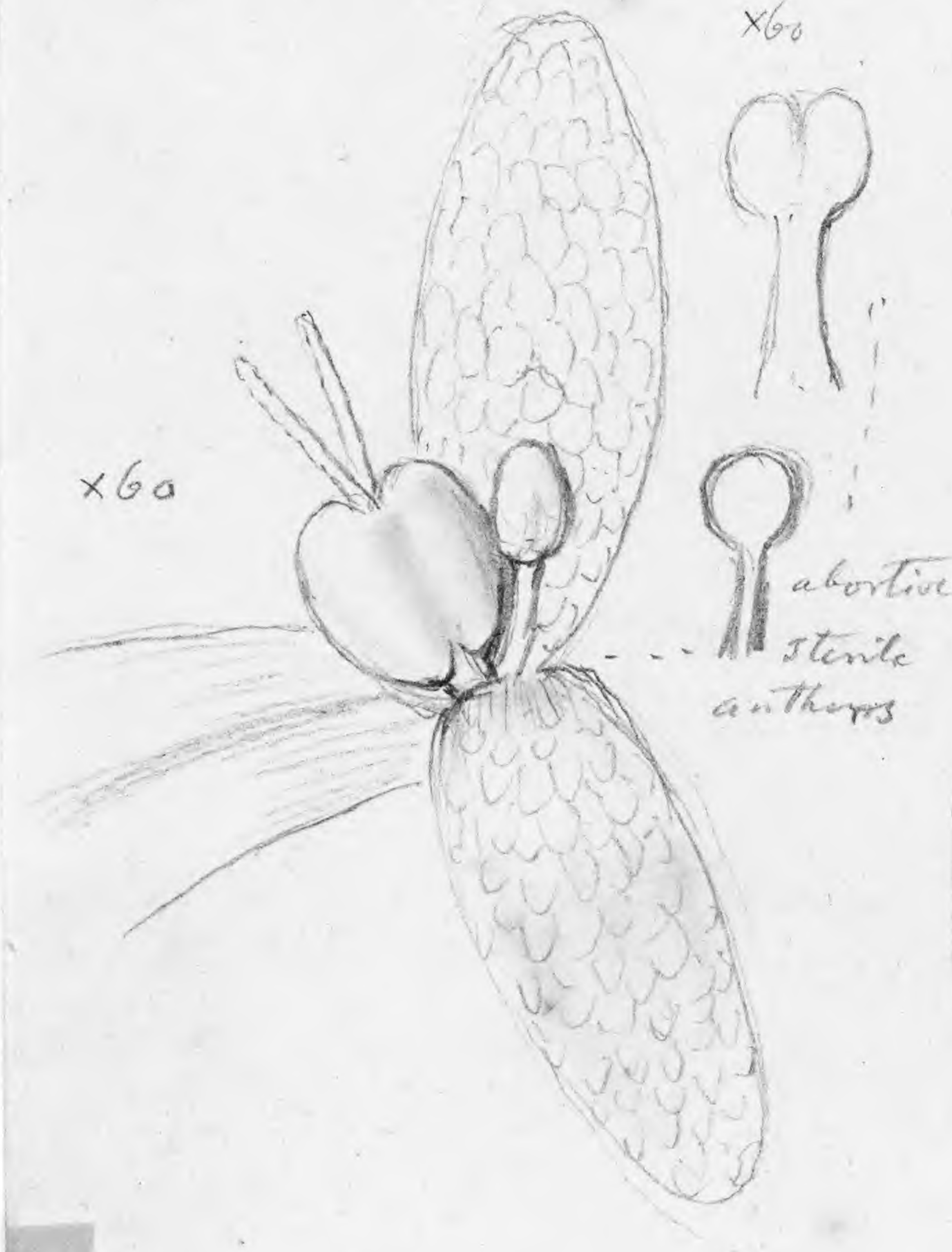
0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

Call. verna Sept 24 1864

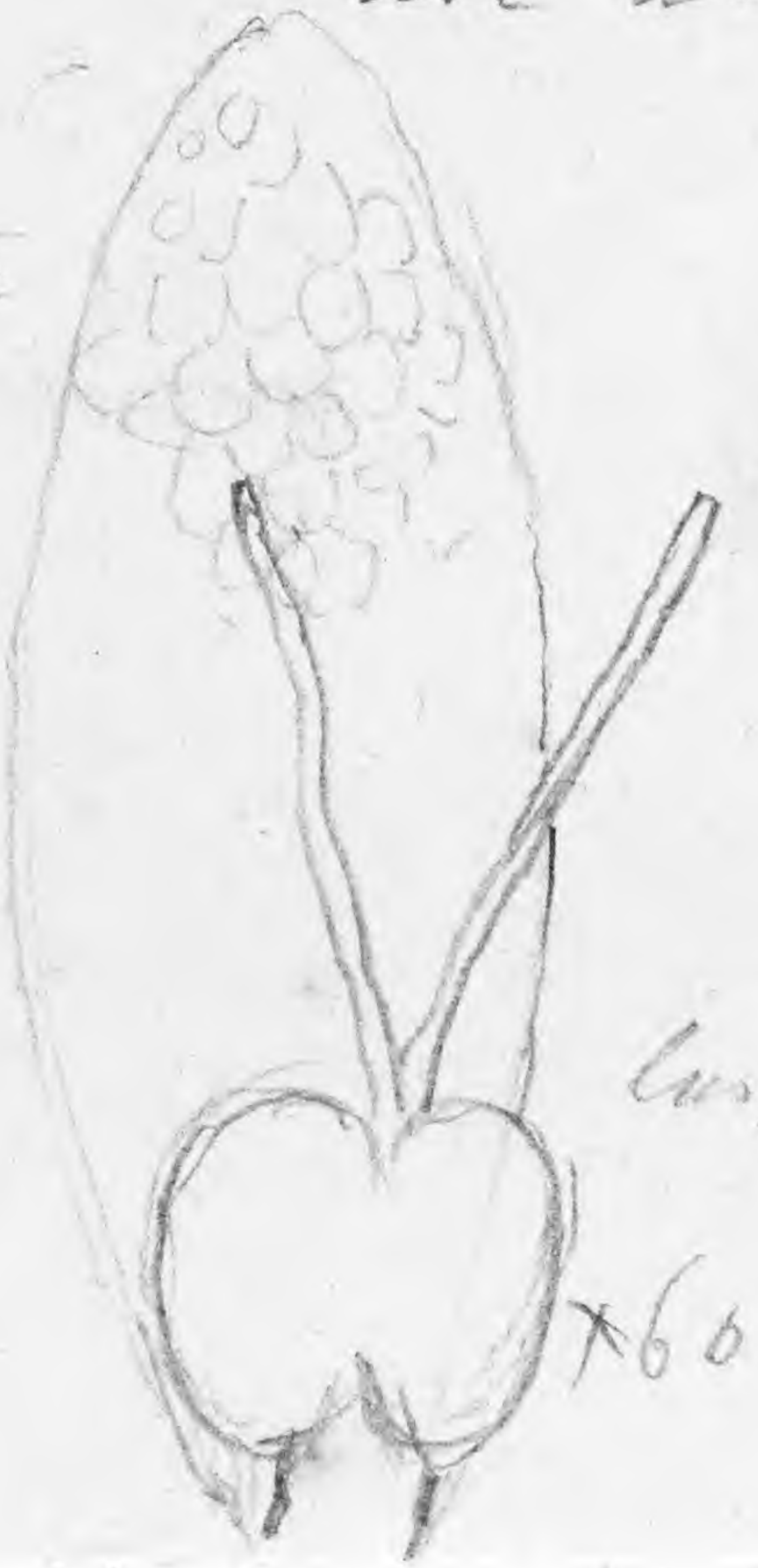
Regel — Petersburg, HG Gray sub nom autumnalis

a land form

919



Styles as long as Ovary before? in flower, fugacious; all the anthers seen are abortive.



longest bracts seen, on same specimen and styles longer just in flower?

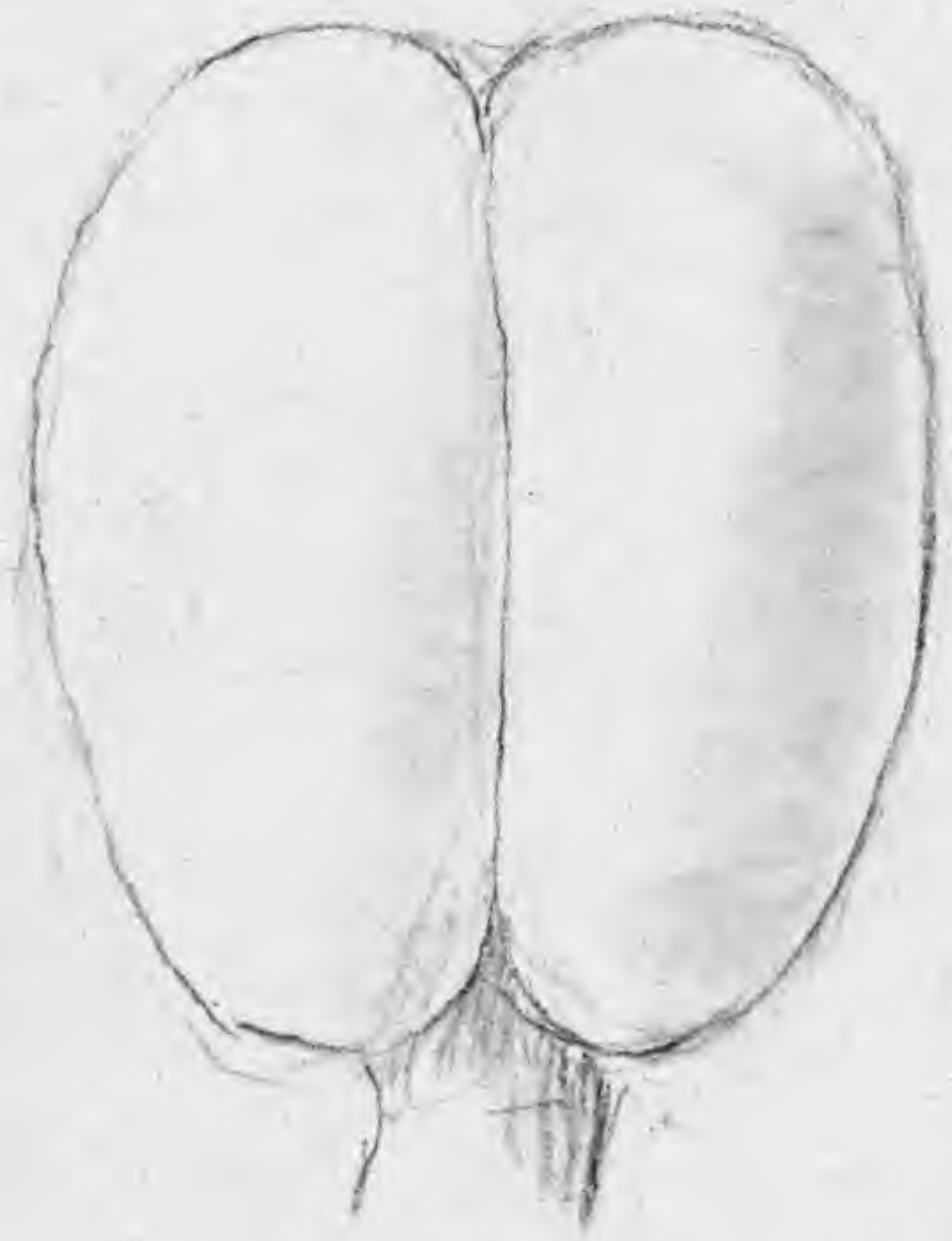
0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

"Callitriche verna
β. minima" Kützing ipse scripsit
ex Herb. H. B. Meisner

Sept 2d 1864

x 30



not quite ripe
peduncled

920

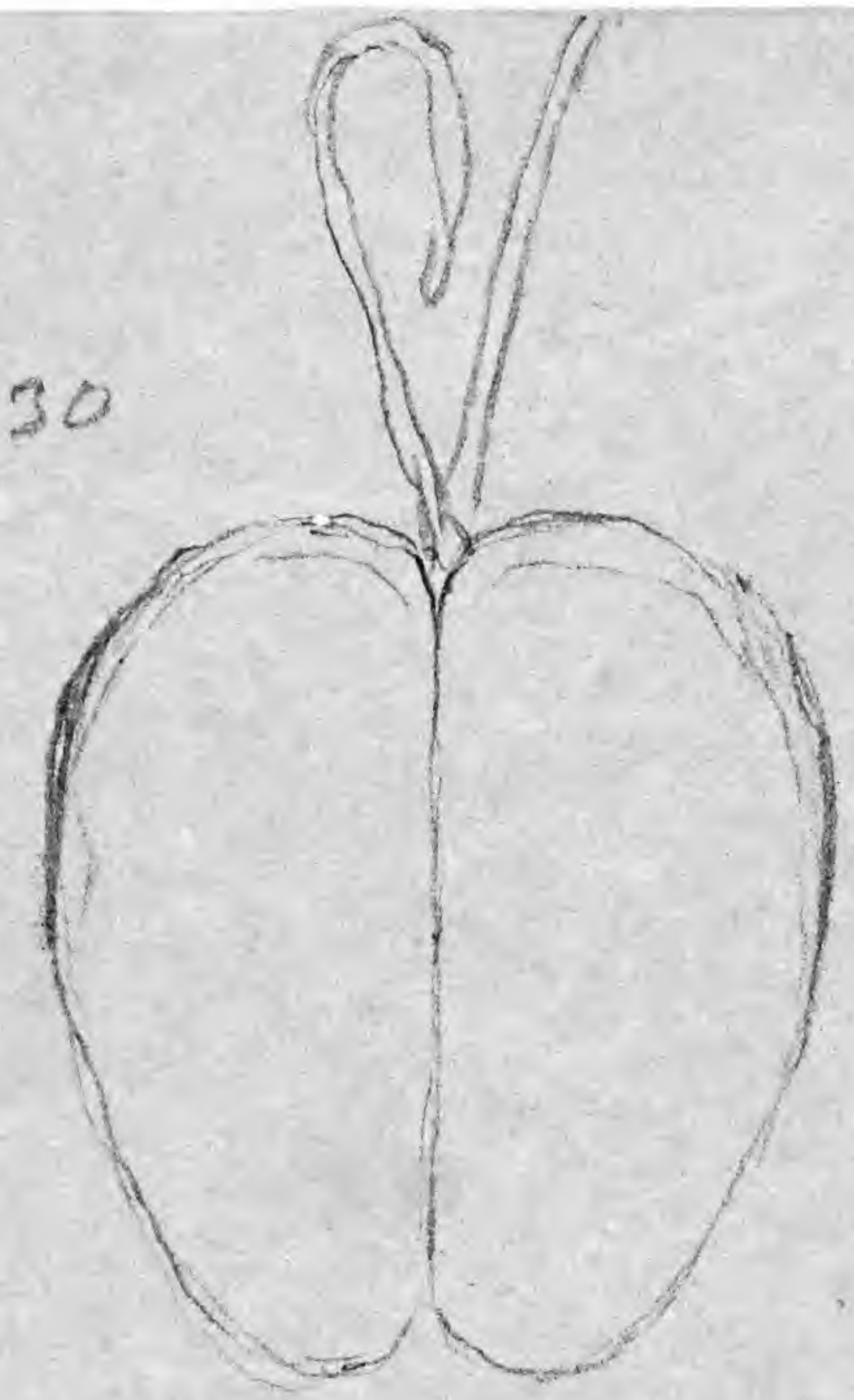
ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

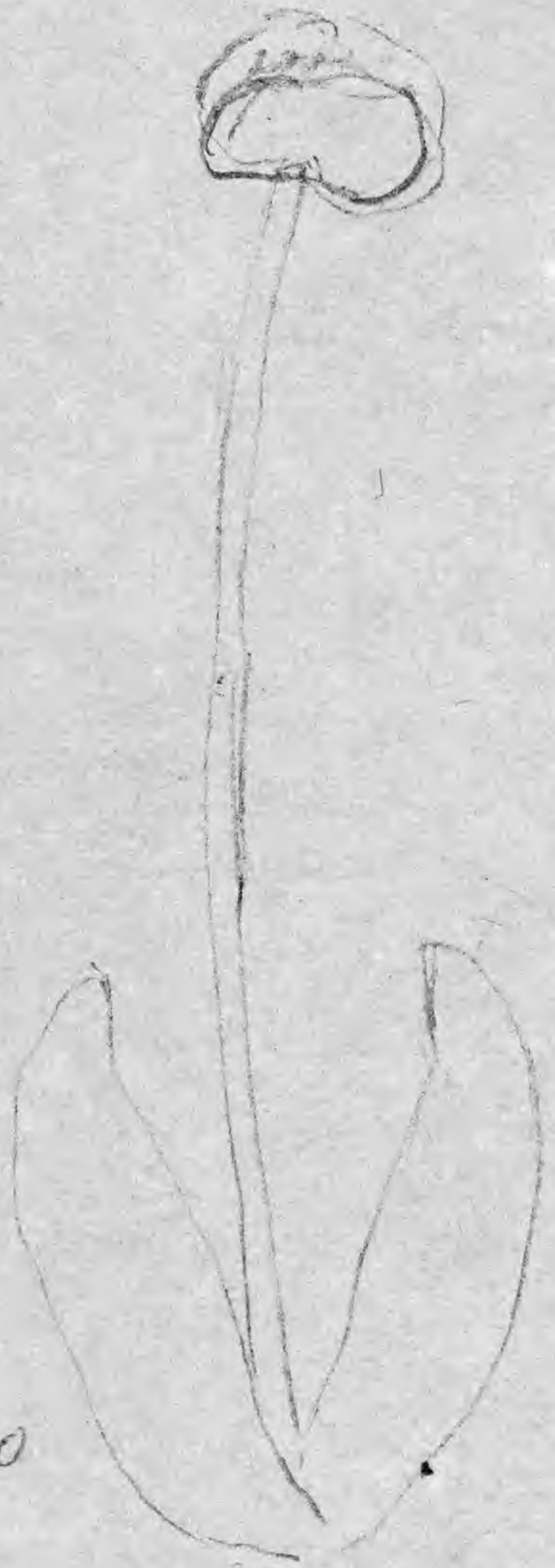
Callitriche verna Dec 10 1864

Wright, Hakodadi, Japan

921



$\frac{26 \times 30}{30} = 0.9 \times 1.0$ mm



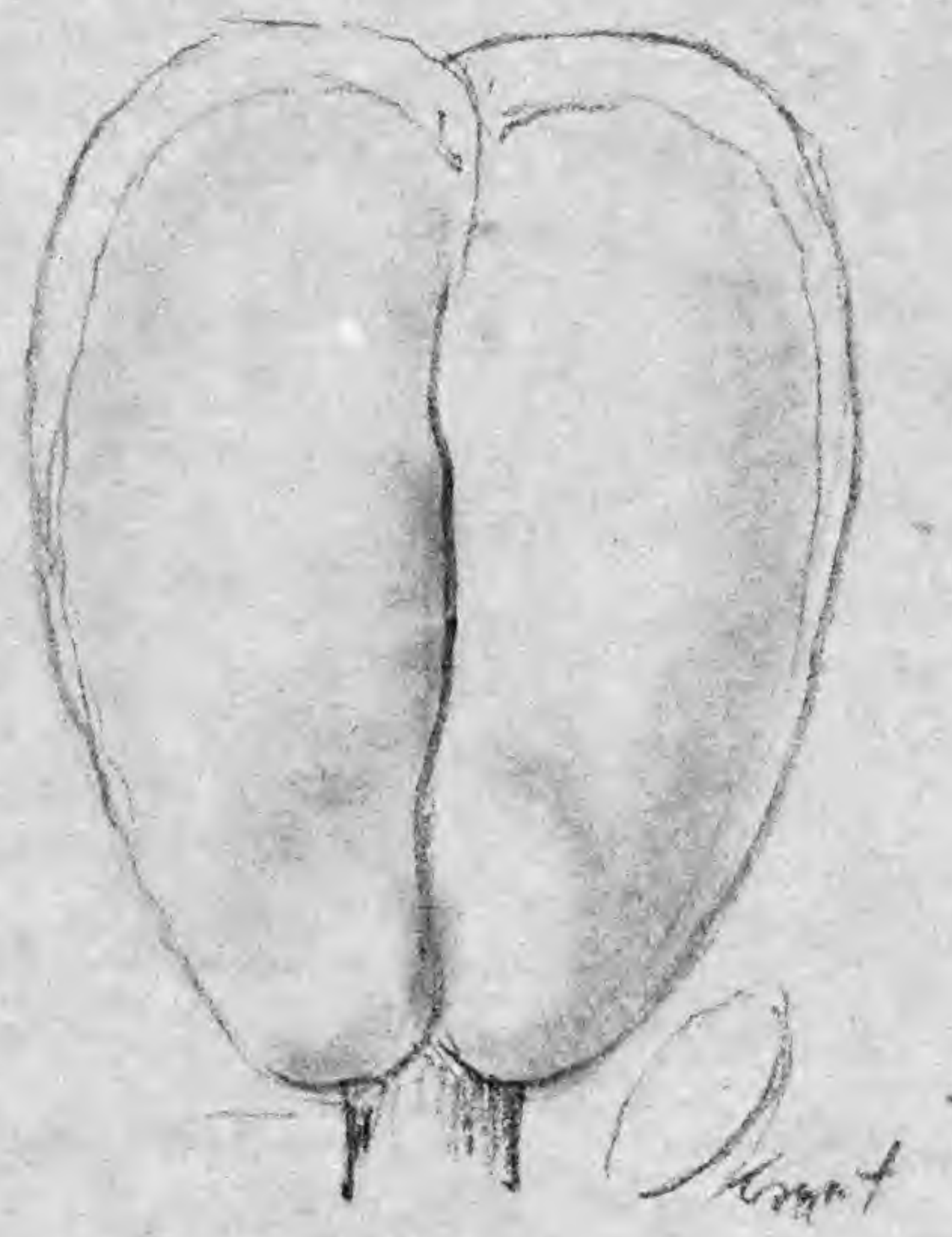
0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

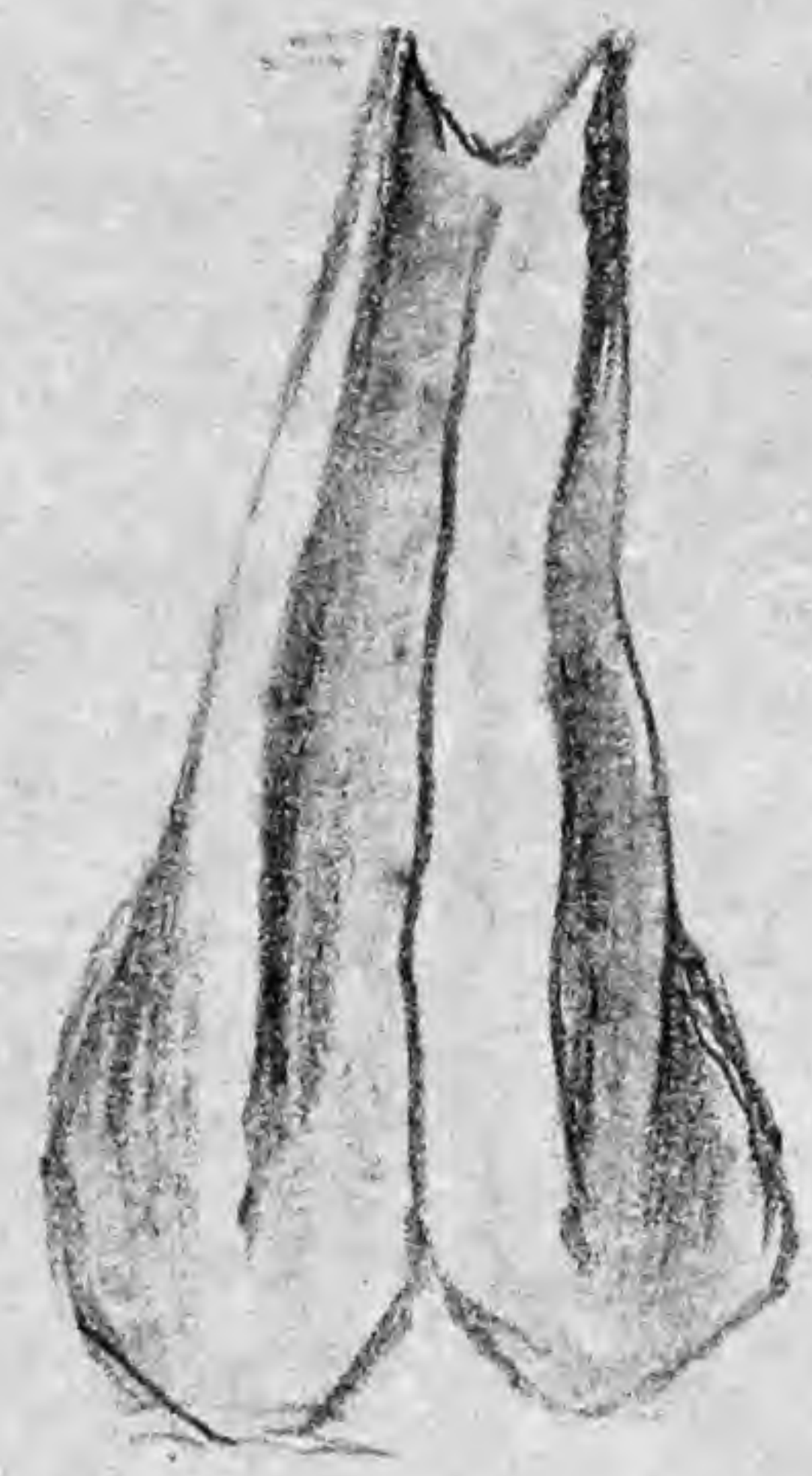
Alex. Leitch,
APOTHECARY & CHEMIST,
Cor. 4th & Olive Sts., St. Louis.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

Callitriche verna Nov 9th 1864

terrestris Carlisle [illegible]





$$\frac{24 \times 31}{30} = 0.8 \times 1.0 \text{ mm}$$

922

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI
BOTANICAL
GARDEN

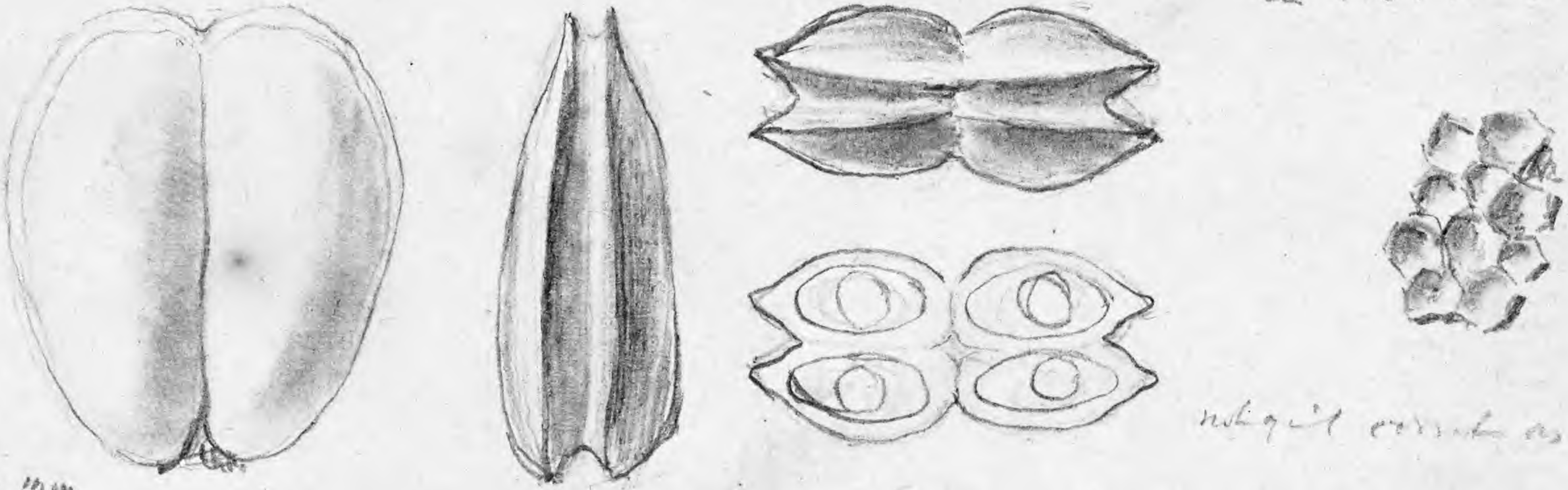
Alex. Leitch,
APOTHECARY & CHEMIST,
Cor. 4th & Olive Sts., St. Louis.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

"Callitriche verna genuina" Kützing misit in Hb. H.B. Mission

Sept 2d 1864

×30



Surface ×150

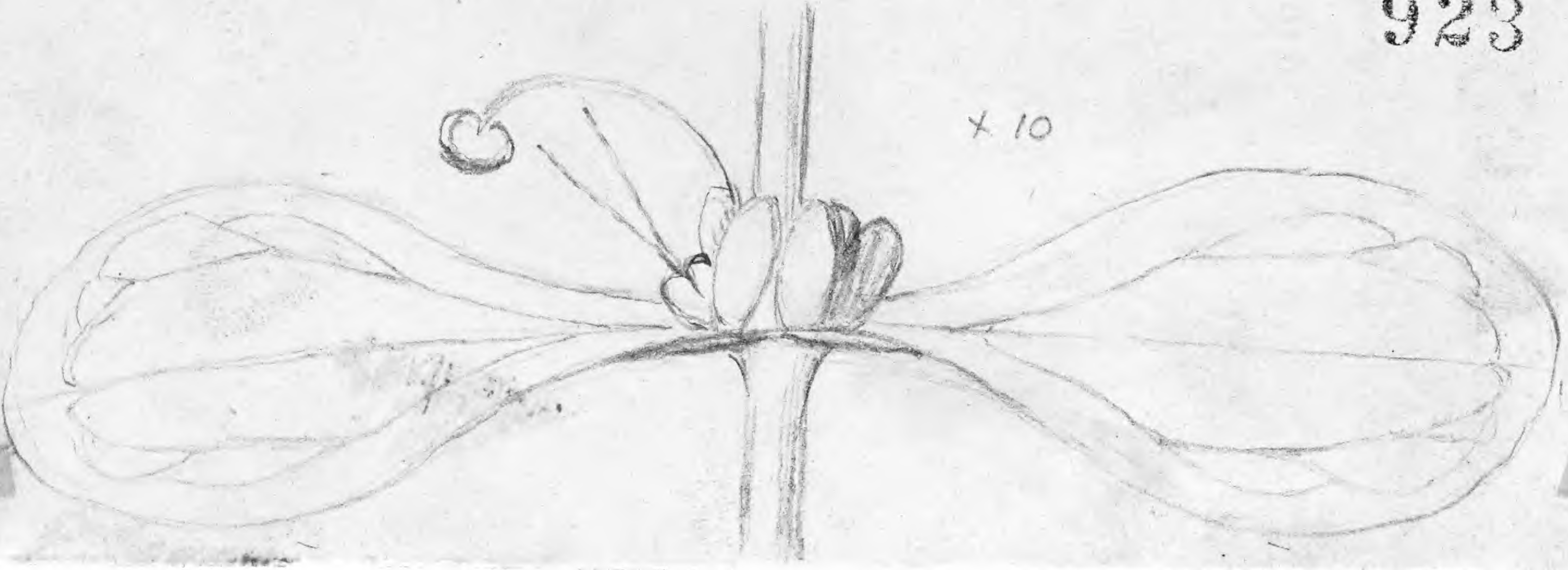
not quite correct as to border & allow

26 × 31 mm / 30 = 0.9 × 1.0 mm

seed not quite ripe

923

×10

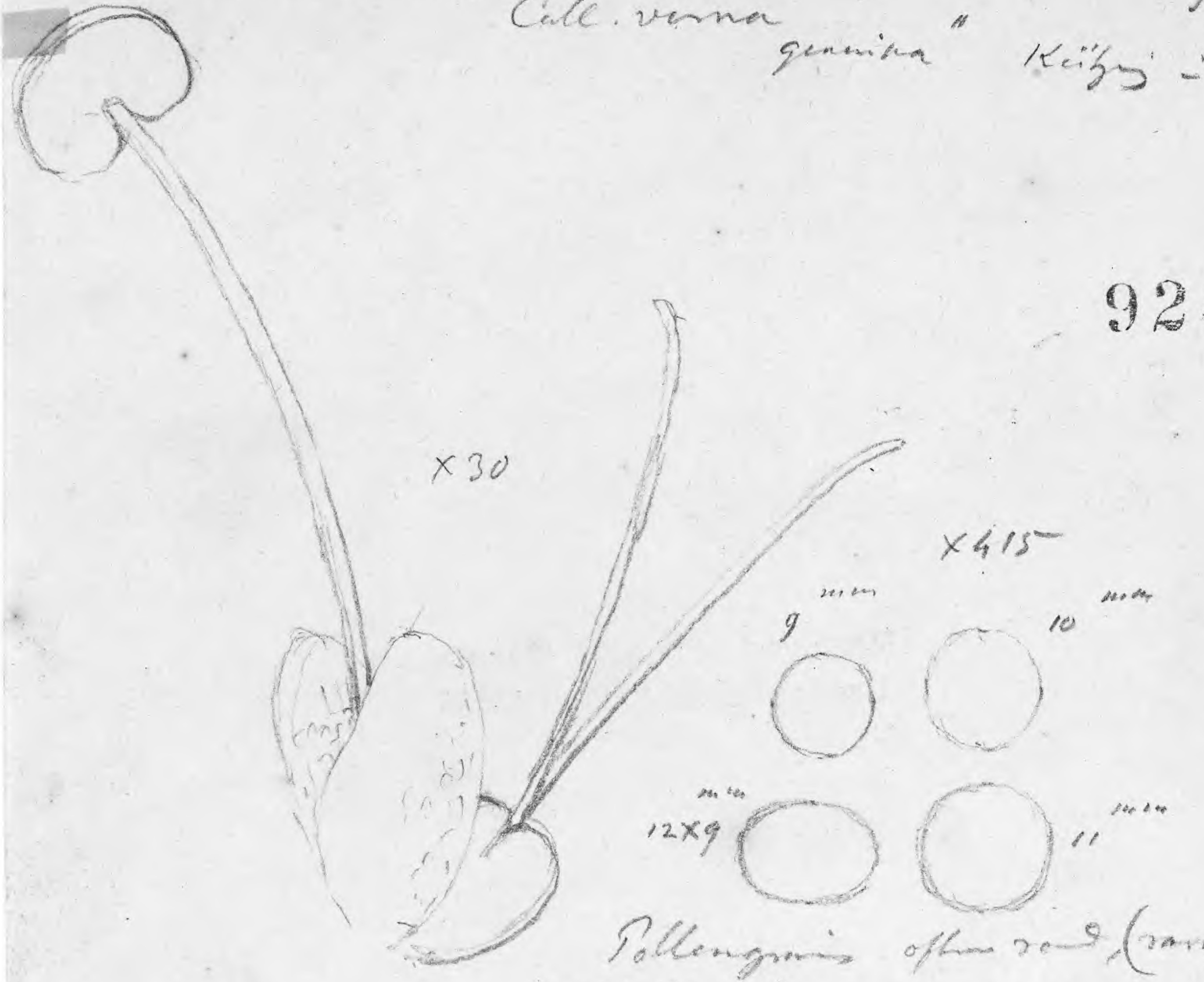


0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

Alex. Leitch,
APOTHECARY & CHEMIST,
Cor. 4th & Olive Sts., St. Louis.

"Call. verna geminata" Kützing : [illegible] Sept 24 1866

924



Pollengrains often round (rarely elliptical) 0.022 – 0.027 mm: d: the elliptical one 0.029 × 0.022

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St Louis, Mo.

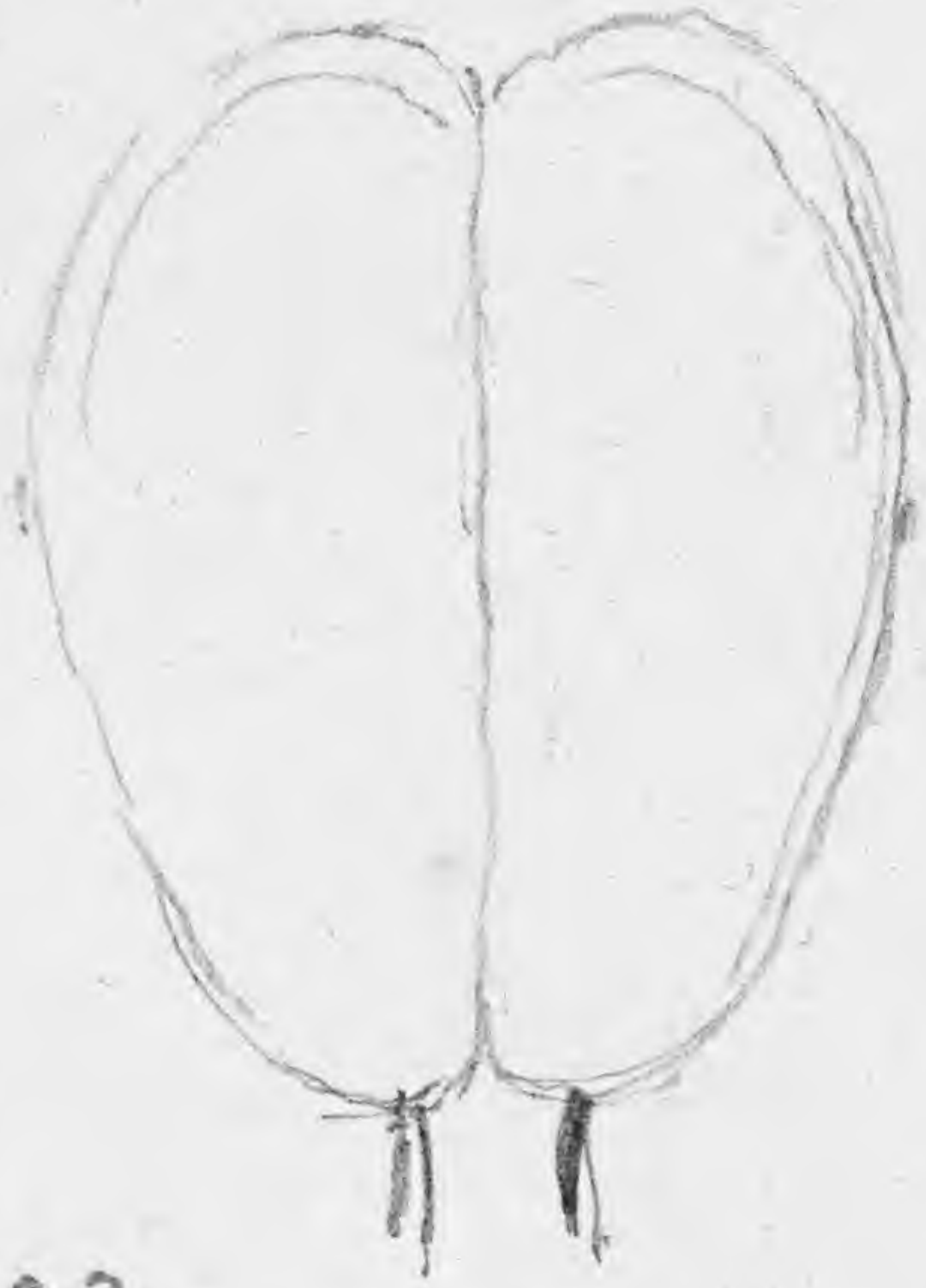
× 30

Call. verna

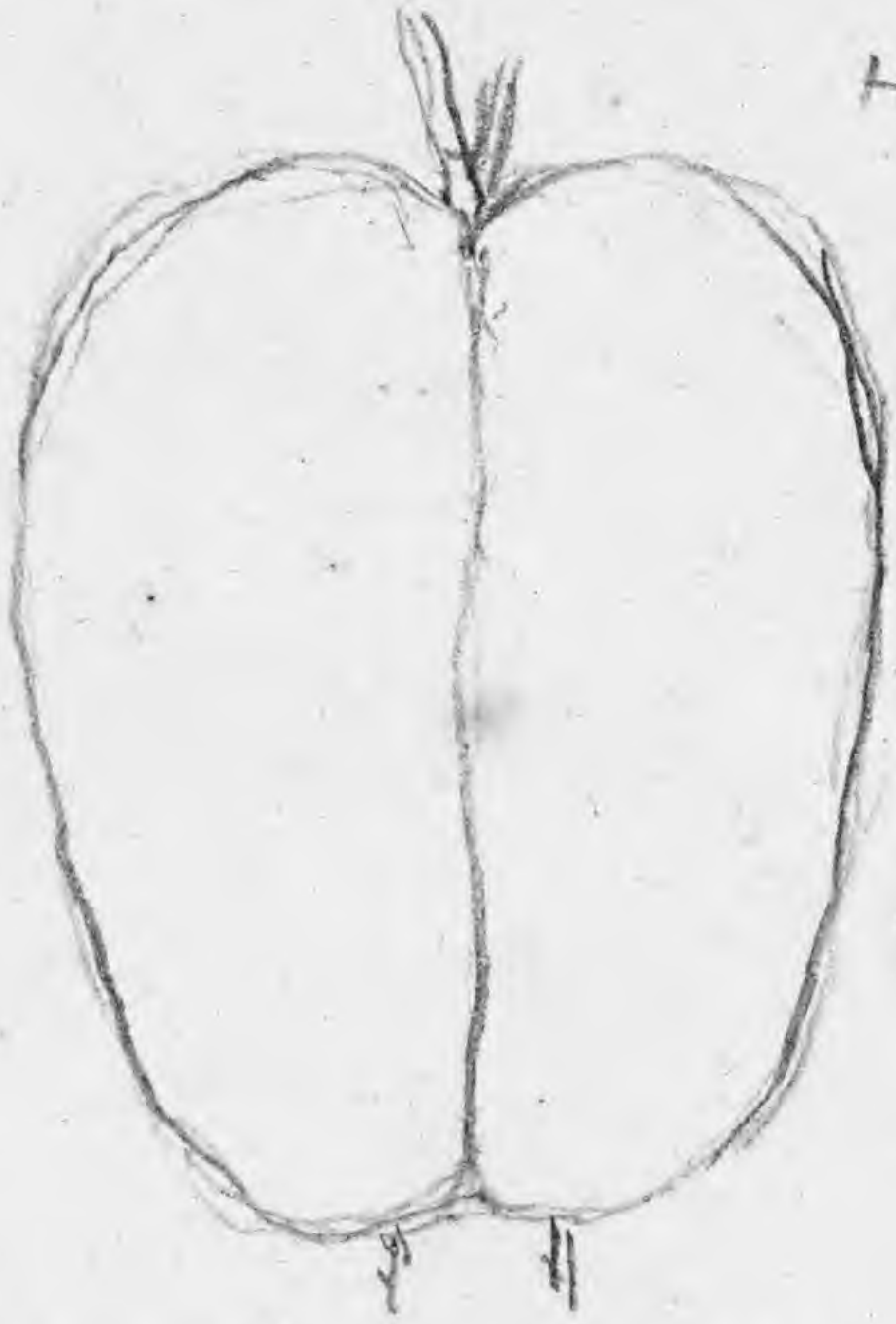
Nov 3d 1864

Herb. H.B. Missouri ex Coll Bernhardi
(Germany ?)
mixed with C. autumnalis Kg
(C. hamulata)

925

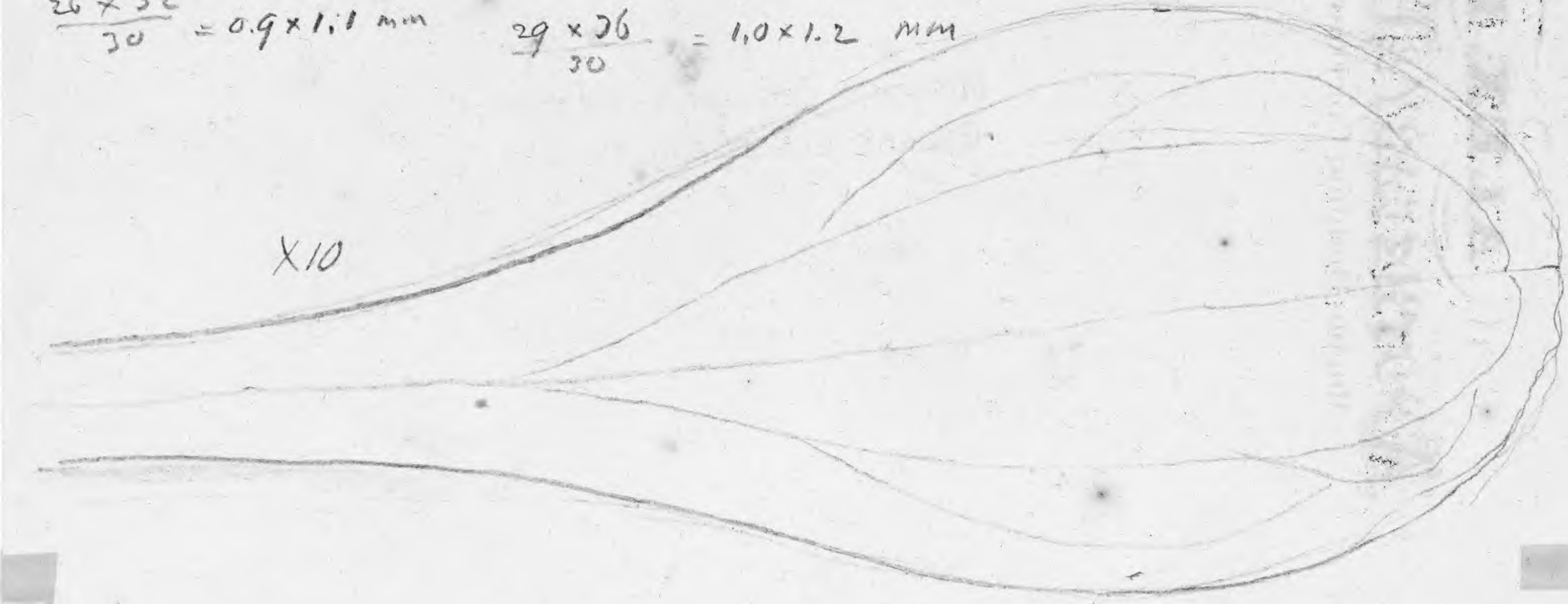


$\frac{26 \times 32}{30} = 0.9 \times 1.1$ mm



$\frac{29 \times 36}{30} = 1.0 \times 1.2$ mm

X10



0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI
BOTANICAL
GARDEN

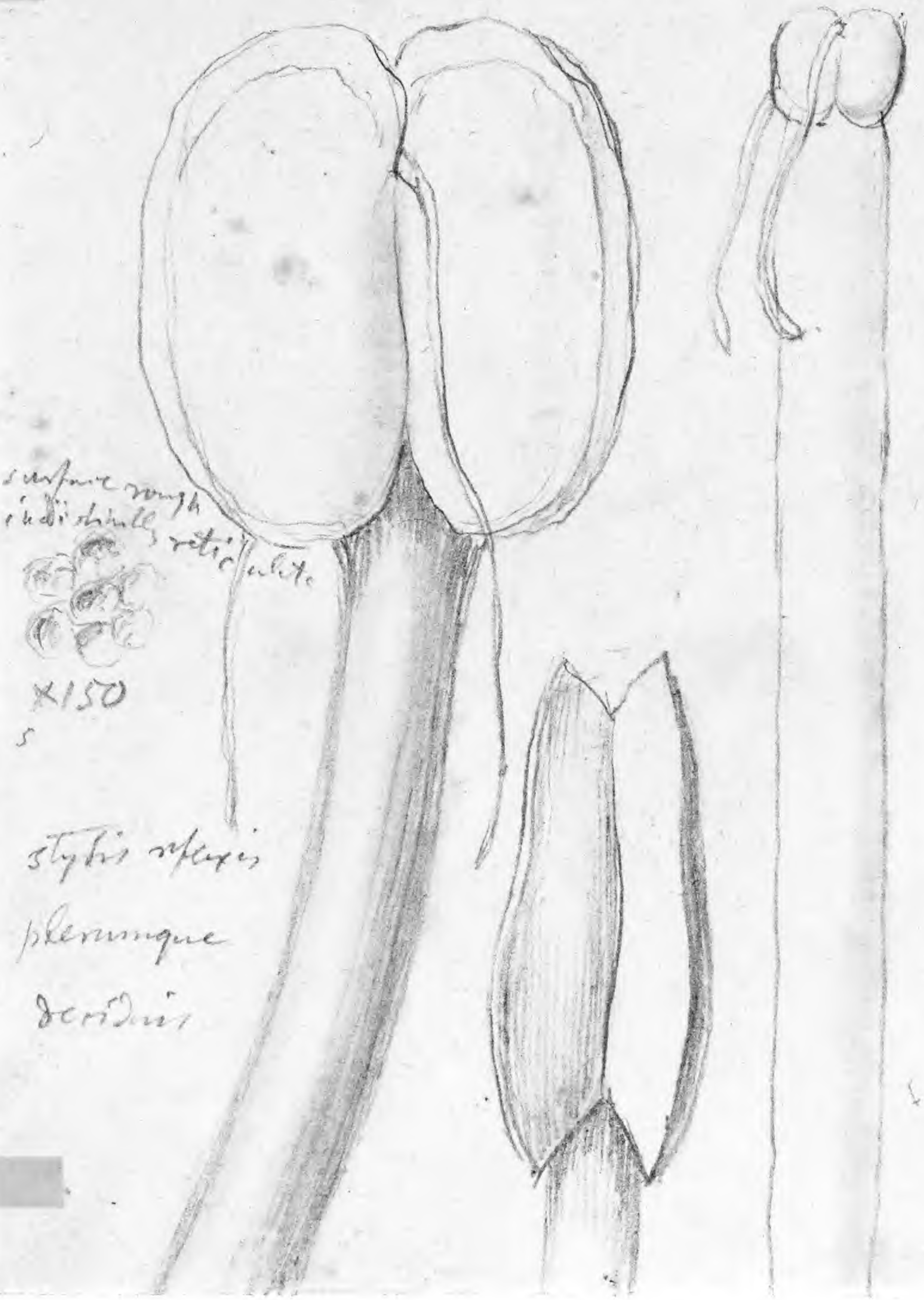
Callitriche pedunculata DC.

Aug 31 1864

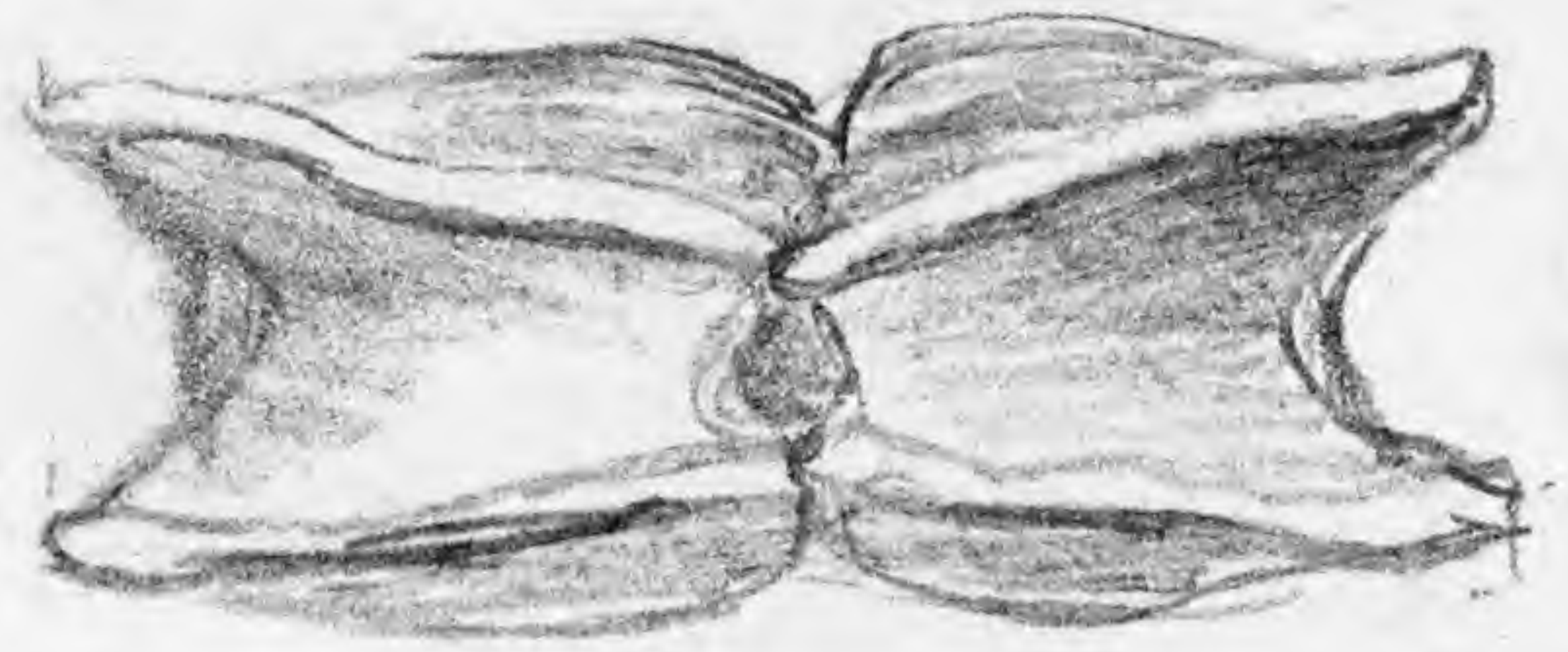
Ex Herb Hort Bot Mission

$\frac{37 \times 39}{30} = 1.2 \times 1.3$ mm

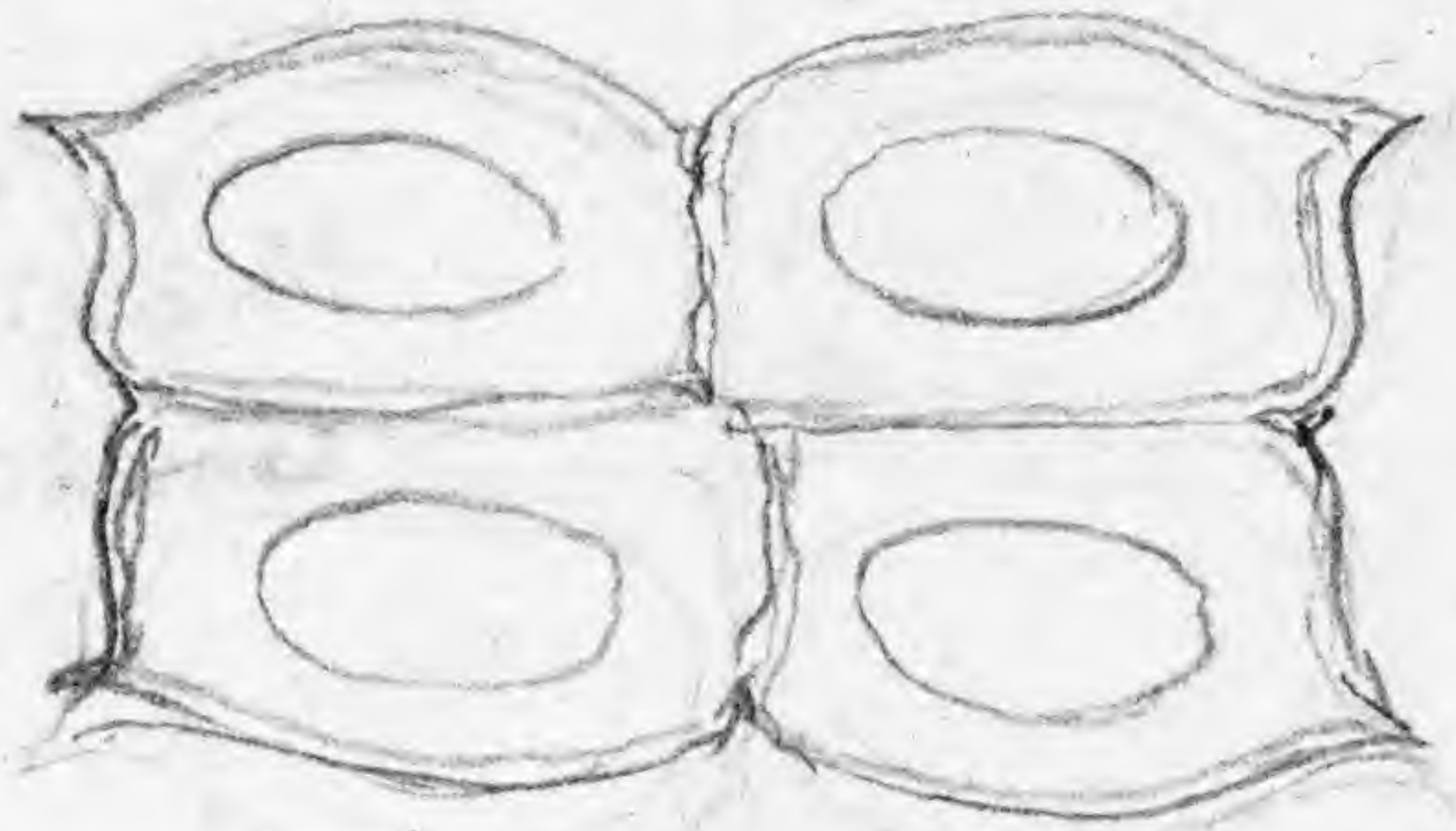
x30



stylis reflexis plerumque deciduis

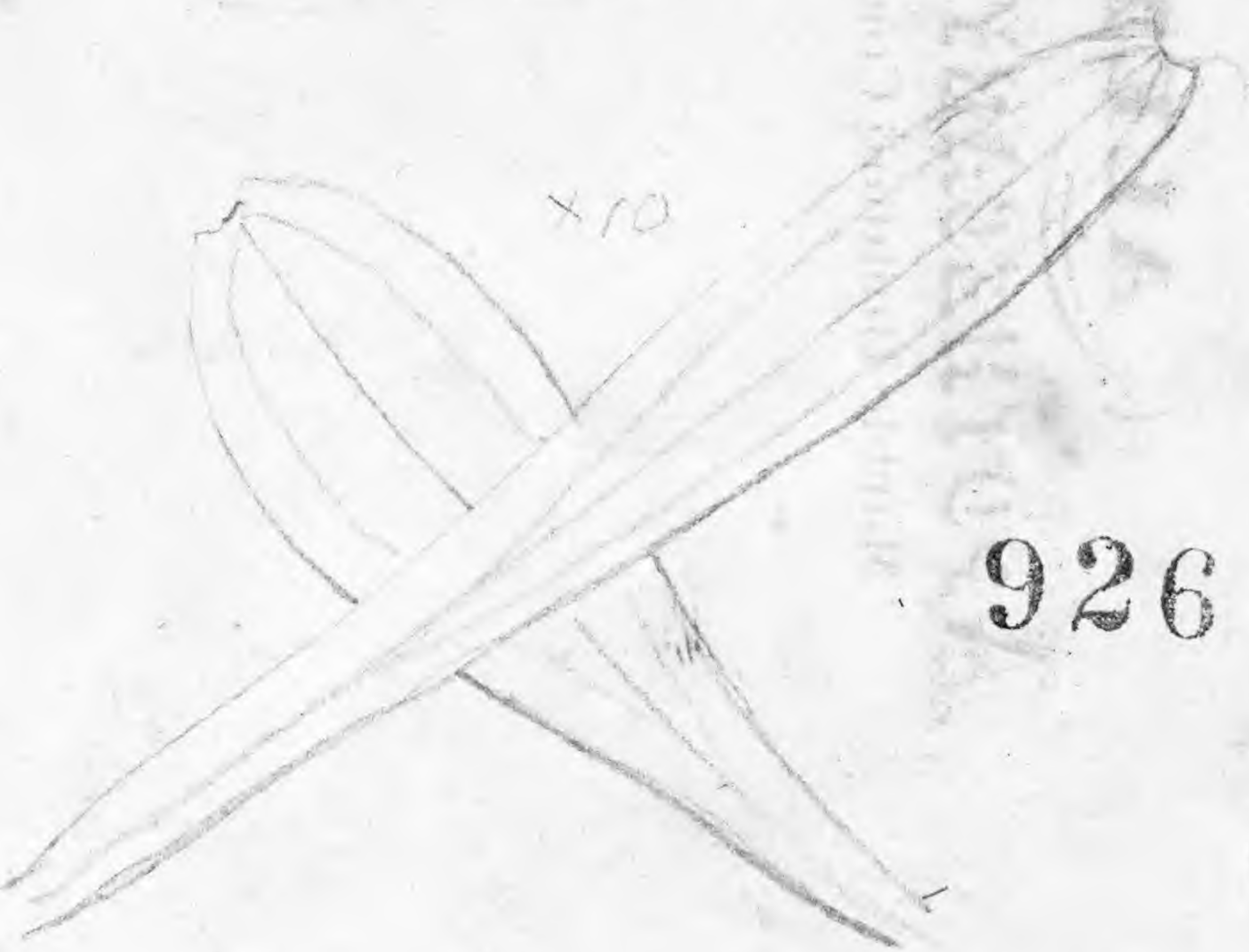


unripe



sect of a ripe fruit soaked

x30



926

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI
BOTANICAL
GARDEN

926A

cancer; the omentum, ovaries and womb were all involved. Even if the tumor had not been malignant, the patient was too much reduced to operate upon. The other—a much more outrageous one—happened in the practice of an old German *physician*, who thought the child lived; but after making his incision, he introduced his hand, felt around in the abdominal cavity, and seized a portion of the large intestine, which he drew out of the opening he had made, and was about to cut it off, when a surgeon, who was standing near, seized his hand and prevented him. On being asked where the child was, he said—"*O, she be absorbed.*"

Case of Rupture of the Uterus. Reported by R. E. Bland, M. D.

This case happened several years ago, in the country, about fifteen miles from St. Louis. In the month of September, about six A. M., I was called to the patient, a very large woman, who had been in labor some time, but the pains were not very violent, and there seemed to be no great necessity for haste. I was warming my hands by the fire, when the lady turned over from her right side to her left, and in doing so seemed to hurt herself, as she exclaimed, "Oh! what a pain!" but as I saw nothing out of the way, and the pains not being very violent, I accepted an invitation to breakfast. On my return to the patient's room, I noticed she had undergone a great change; her countenance was haggard, and she was vomiting. Apprehending some disaster to the uterus, I, as soon as possible, made an examination. The os was dilated somewhat, and yielded easily to the hand, but no child could be felt. On introducing my hand into the womb, and passing it to the right side, I could discover nothing, but on examining the left side, I found a large rent, and through this opening I felt the child in the cavity of the abdomen, into which it had escaped through the ruptured womb. Following the advice of Dewees, and having felt the child also through the abdominal wall, I attempted to deliver through the rent in the uterus; but the bowels came in front of the fœtus, protruded through the opening, and so obstructed it that I could not succeed. I then sent for my friend Dr. Morris, but he not being at home, the messenger brought another physician, who, on first examination, said he did not discover the rupture; but I explained where it was, and passing my hand again through the opening, he acknowledged that he felt my fingers through the

C. pedunculata DC.

Flor. fr. IV. 414.

Flor. fr. ed III. no. 3656
Bor. III. 71
Hegelm. Mon. 1864 p. 57

68–71.

too near hamulata

abdominal wall. On making a re-examination, the *doctor* said he felt the placenta, loose in the womb, which he would remove. I warned him not to do it, that he was probably mistaken; but he again used traction, and the substance came away with his hand, when he said he did not think *anything else could be done*, and soon left. After he was gone, I examined this, and Dr. Morris also saw it, and we found it to be about eighteen inches of the bowel. I do not think, however, the amount of traction which he employed would have been sufficient for so disastrous a result, unless there had been softening of the bowel. The patient lived about two days and a half after the rupture of the womb occurred.

Dr. PHILLIPS said he had seen two cases of rupture of the womb, in both of which Cæsarean section was performed. In one case the mother lived; in the other the mother died on the eleventh day after the operation. I believe it has been stated that no woman ever survived the operation after ruptured womb.

Salivary Calculus.

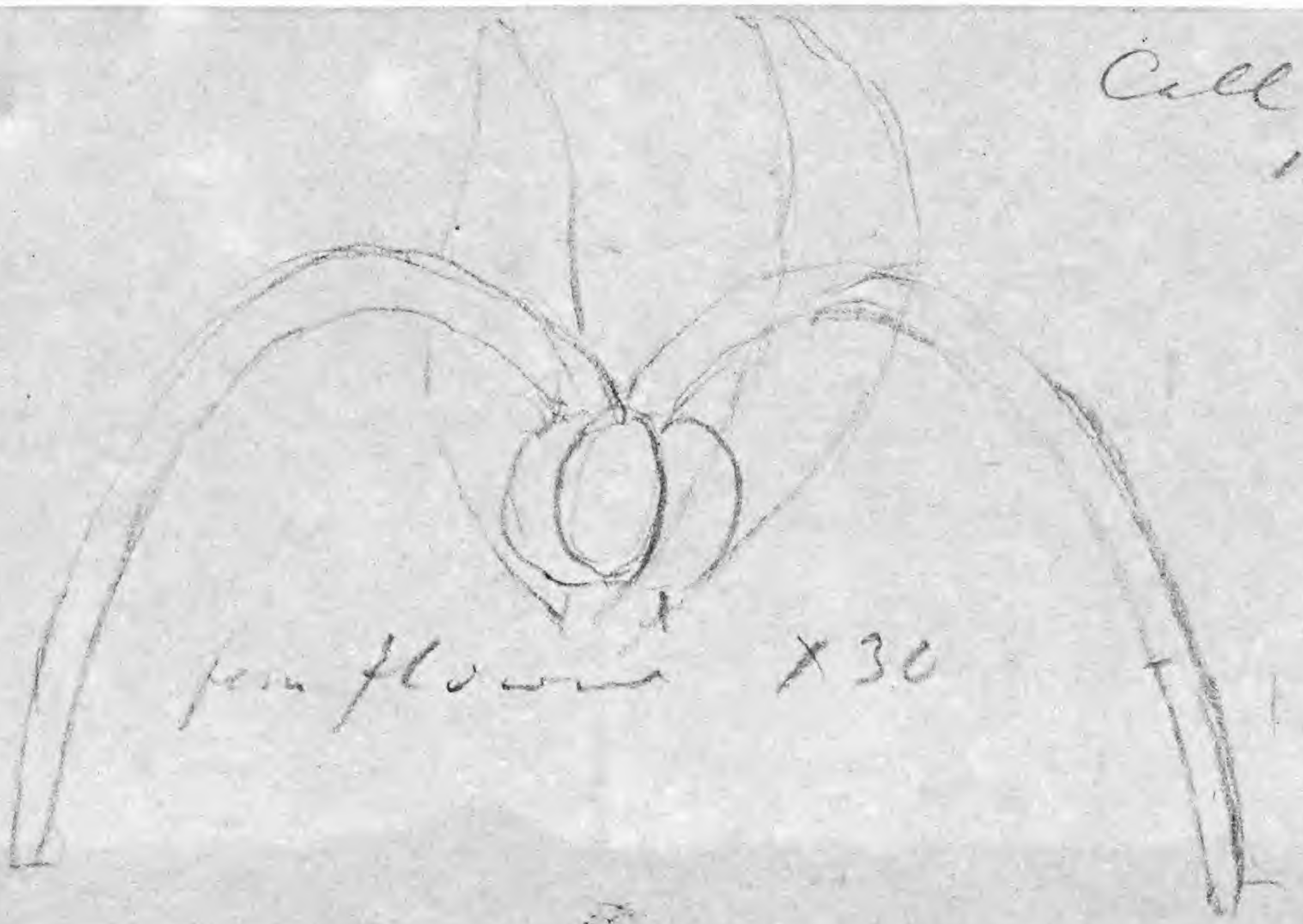
Dr. PAPIN presented to the Society an interesting specimen of salivary calculus, which he had removed from the right side of the soft palate of a patient lately under his care. The patient, a lady sixty-five years of age, had suffered from slight, but very annoying sore throat, for two years. She had consulted physicians here, but being informed it was nothing serious, and the treatment giving no relief, she went to New York and Philadelphia, and the surgeons whom she consulted there assured her she was only laboring under a slight sore throat—she would soon get well. She returned home and consulted two physicians before I saw her. When sent for, I found the patient very nervous, and somewhat debilitated. On examining the throat, I found the soft palate on the right side slightly red and tumid, and in the central position I noticed an ulcer with dark centre; on touching the dark spot, I felt something hard, like bone, and substituting the dressing forceps, I extracted a salivary stone, which I now show you. These seem to be very rare. I have only heard of two being met with in St. Louis—one by Dr. Pope and one by Dr. Phillips.

MISSOURI BOTANICAL GARDEN
GEORGE [illegible] PAPERS

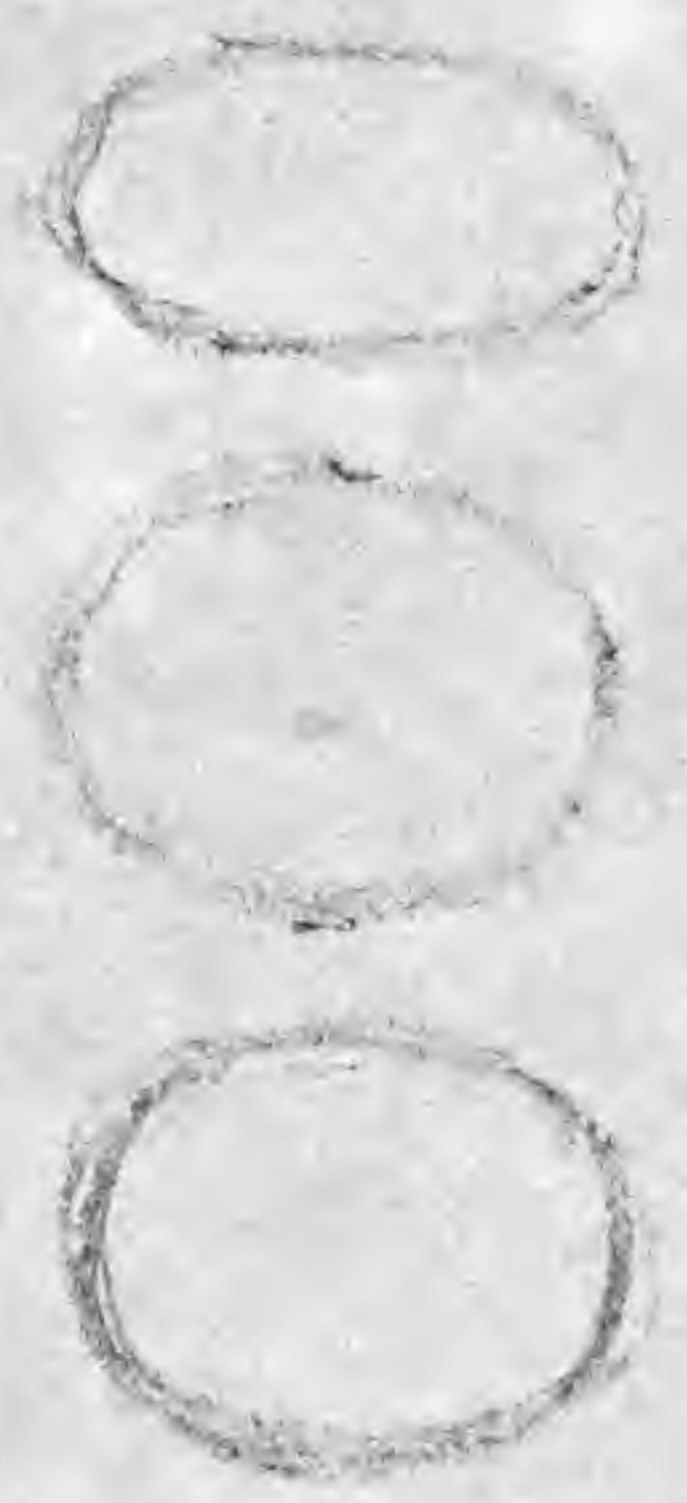
0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

Cell. [illegible] ~~[illegible]~~ Cier 1842 [illegible]

Nov 19 1864



fem flower x 30

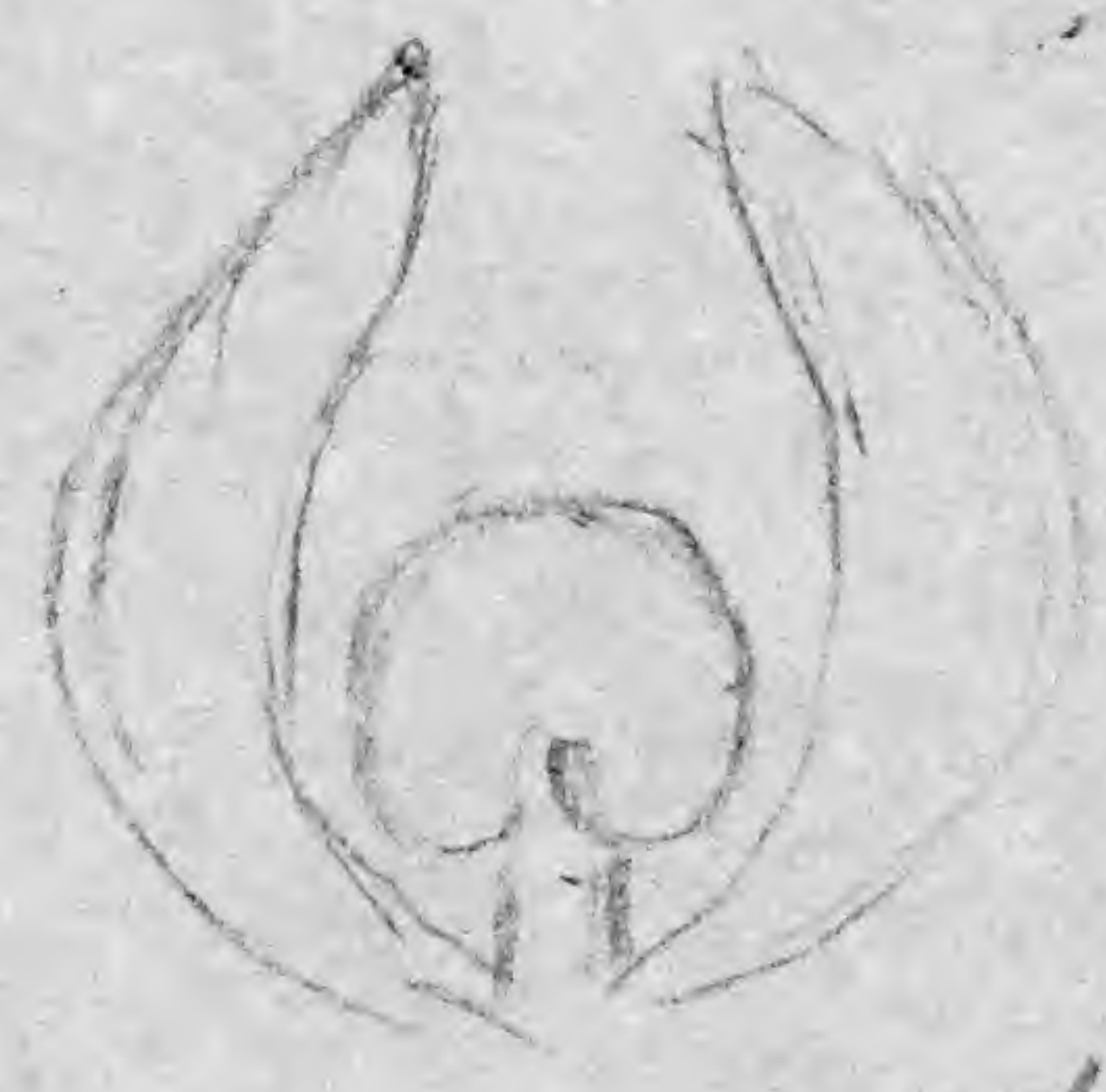


few

grains found
in effete
anthers, all oval or
elliptic.

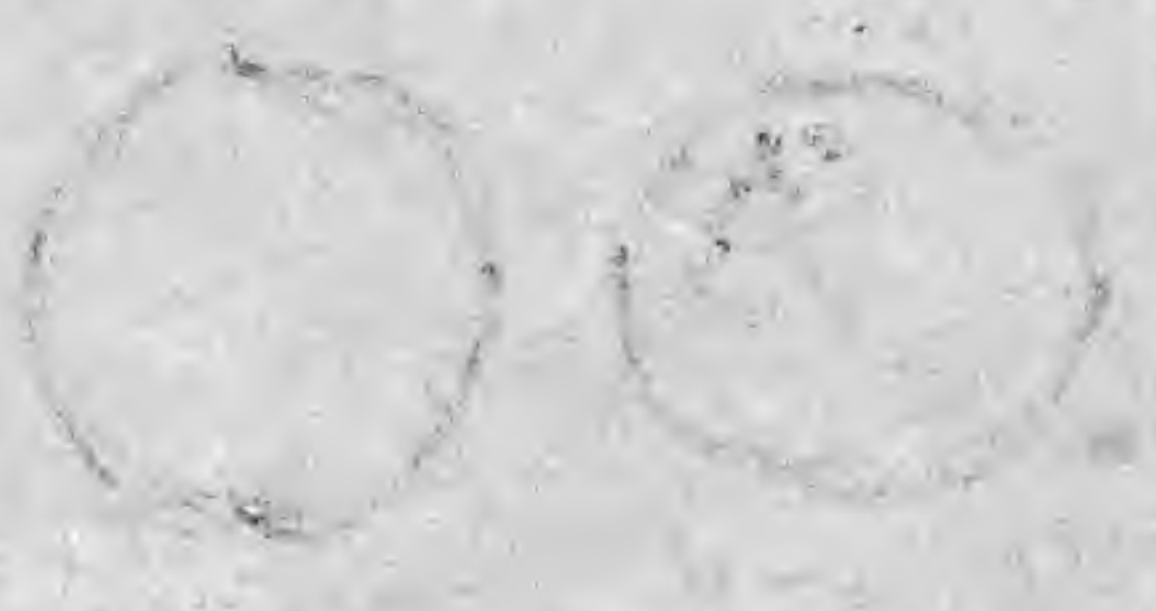
x 415

0.022 – 0.023 in longest diam



very young anther
x 30

0,017 – 0,018 mm



Pollen of this anther
unripe, mostly
x 415 globose

927

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

Alex. Leitch,
APOTHECARY & CHEMIST,
Cor. 4th. & Olive Sts., St. Louis.

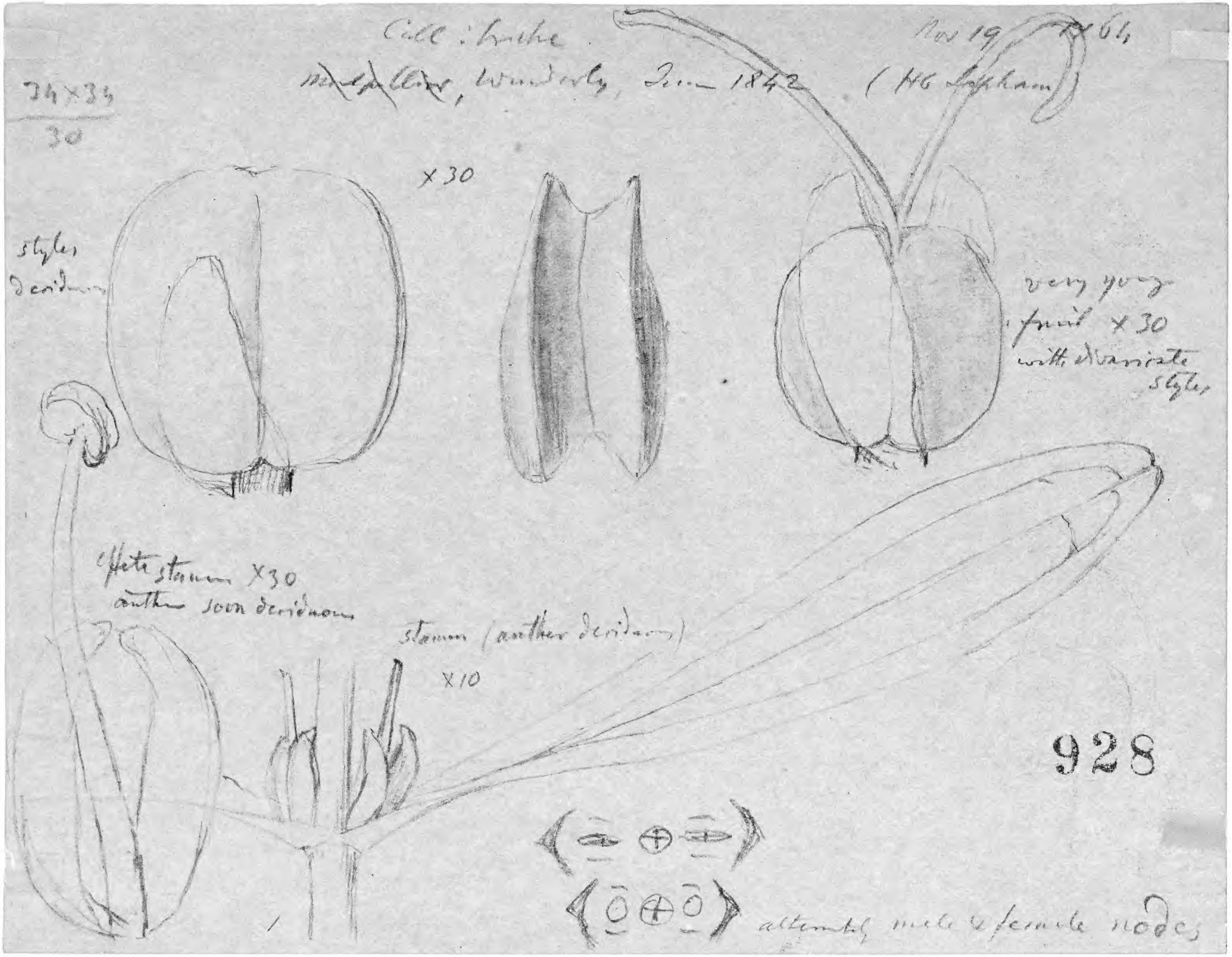
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

Coll : Leiche

[illegible], Wunderly, Jan 1842 (HG Lapham)

Nov 19 1864

24 x 33
30


x 30
styles deciduous
very young fruit x 30 with divaricate styles
Effete stamen x30 anther soon deciduous
stamen (anther deciduous)
x10
alternately male & female nodes

928

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

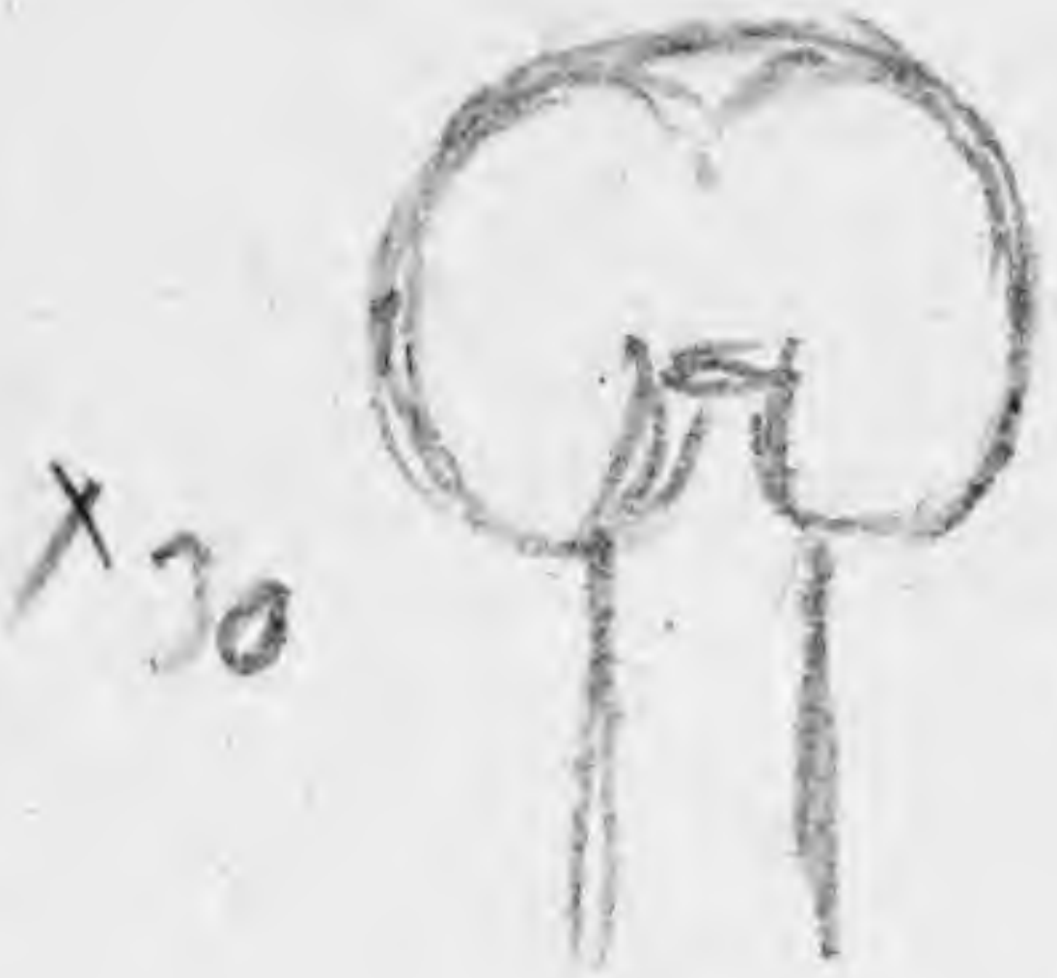
Alex. Leitch,
APOTHECARY & CHEMIST,
Cor. 4th. & Olive Sts., St. Louis.

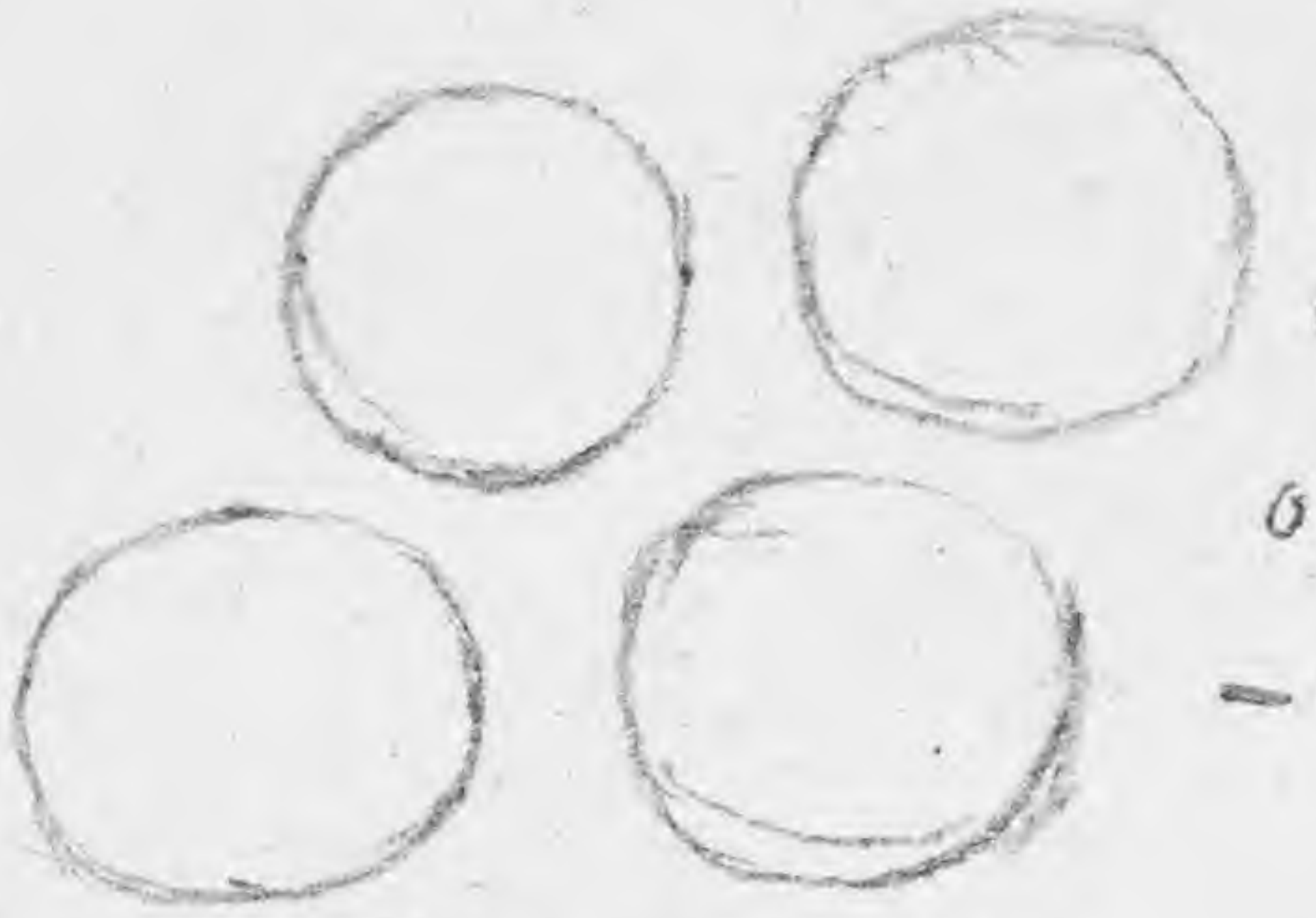
0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

"Call. pedunculata" Nov 4 1864

Angers in Hb. Durand

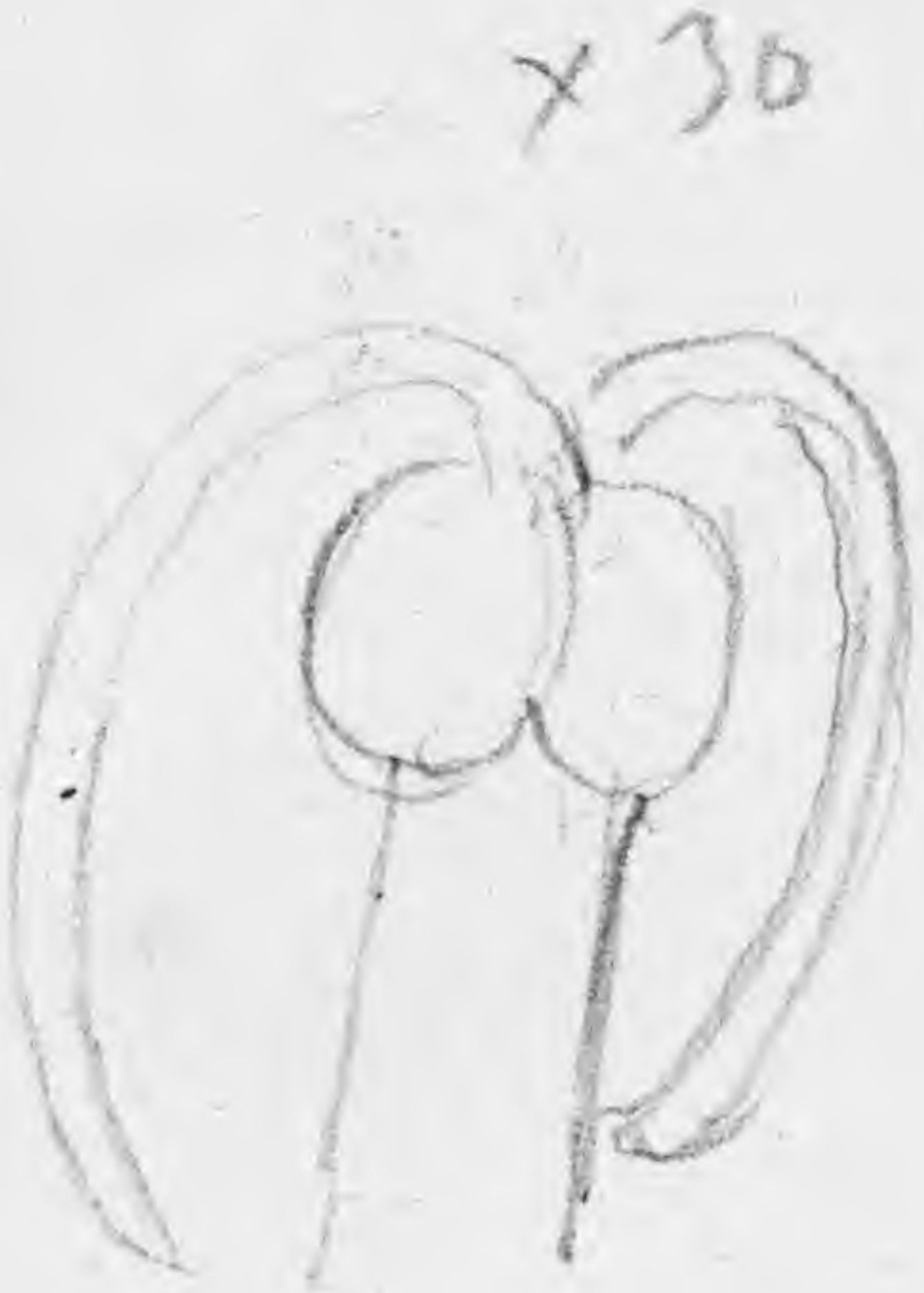
929



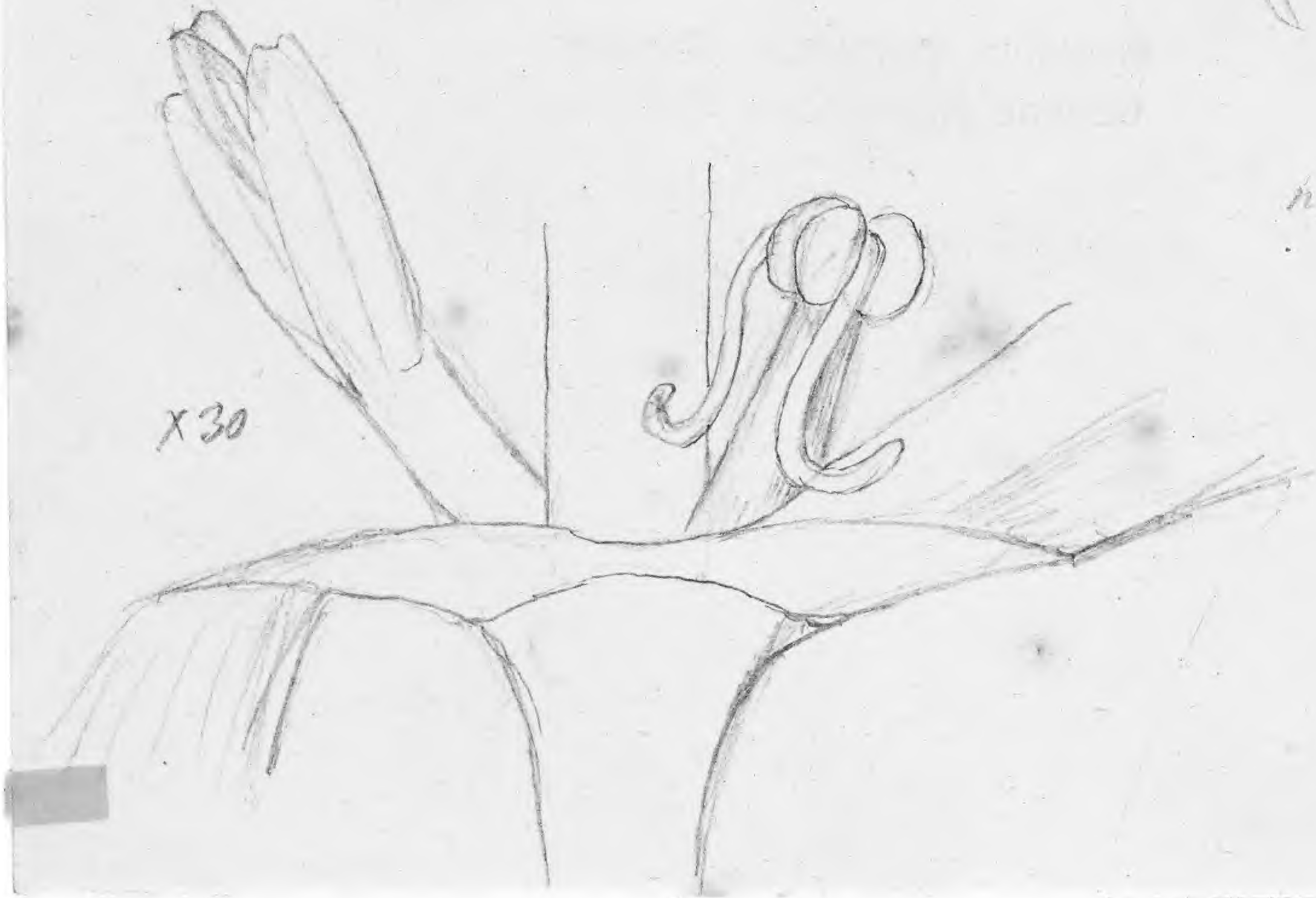


longest diameter 0.022 – 0.026 mm

Pollen x 415



no bracts observed



0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

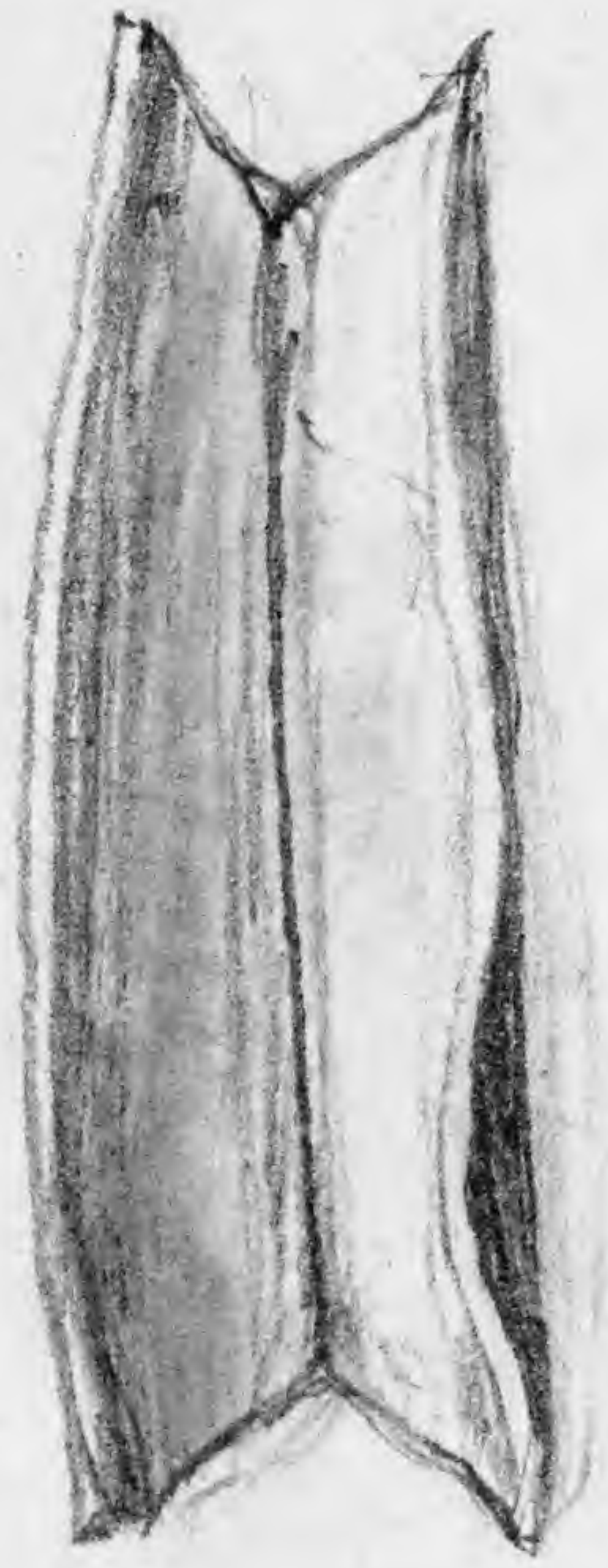
ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

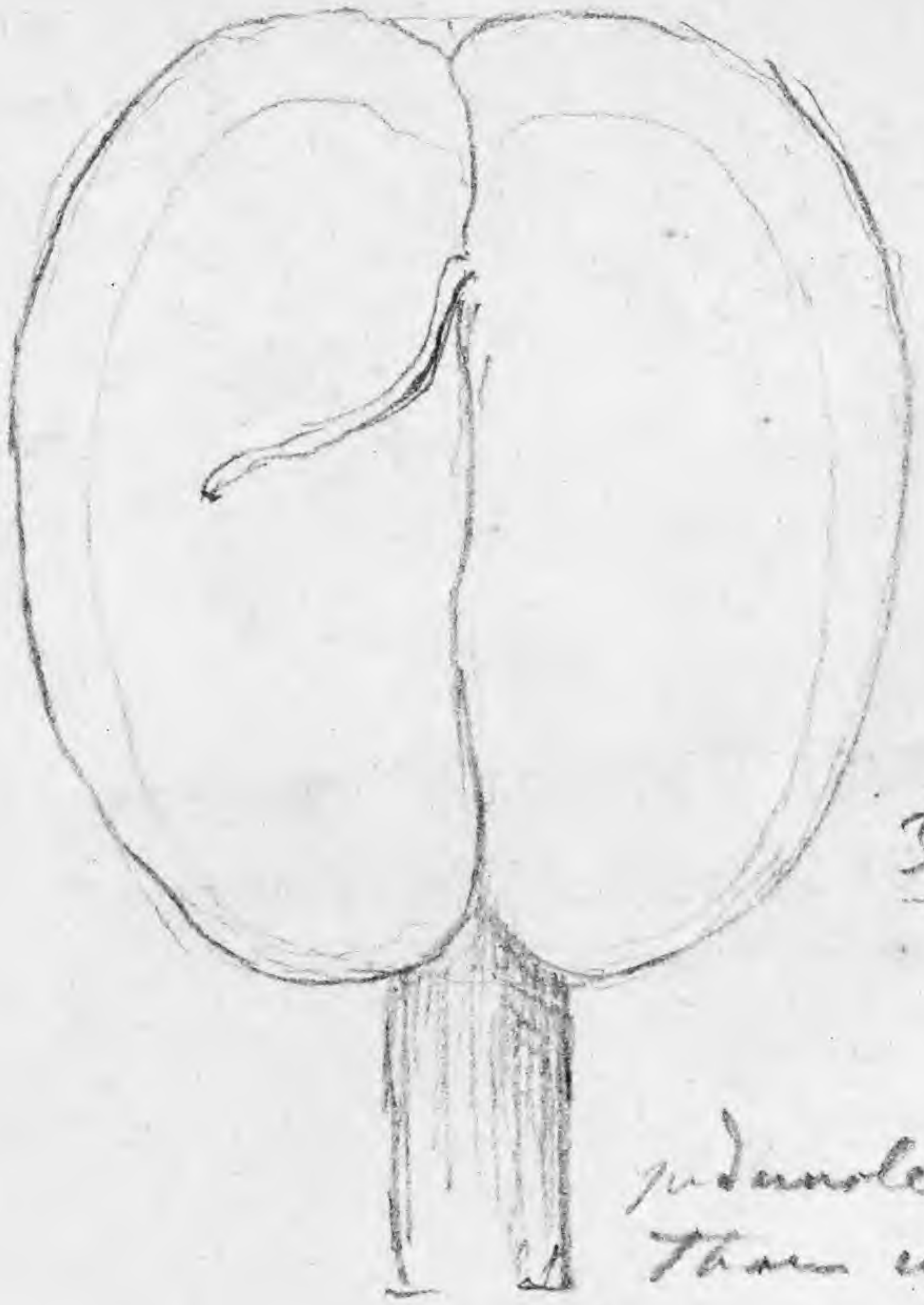
0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

Octob 9 1864

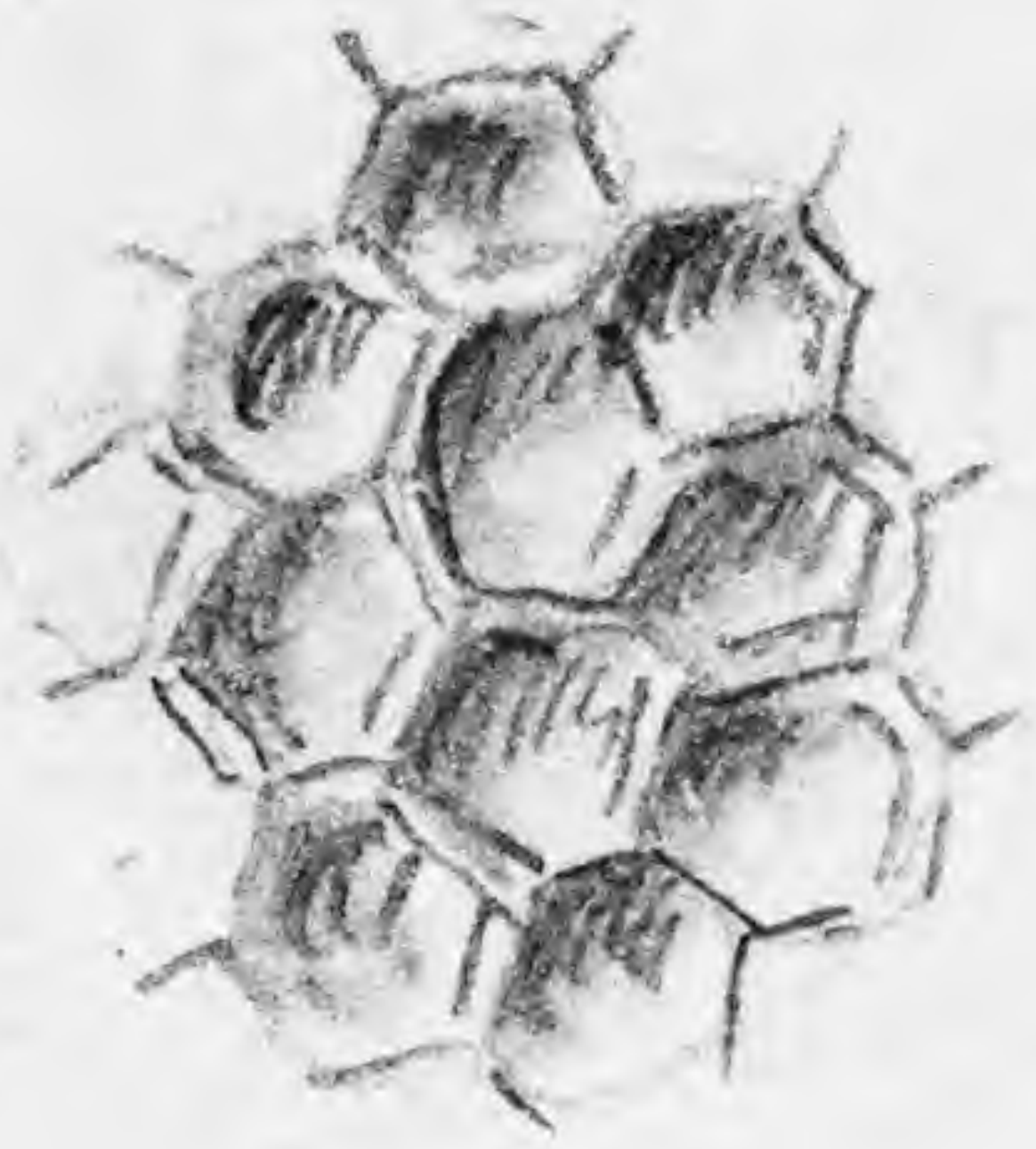
"Callitriche pedunculata"
Angers
— H. Durand

x30



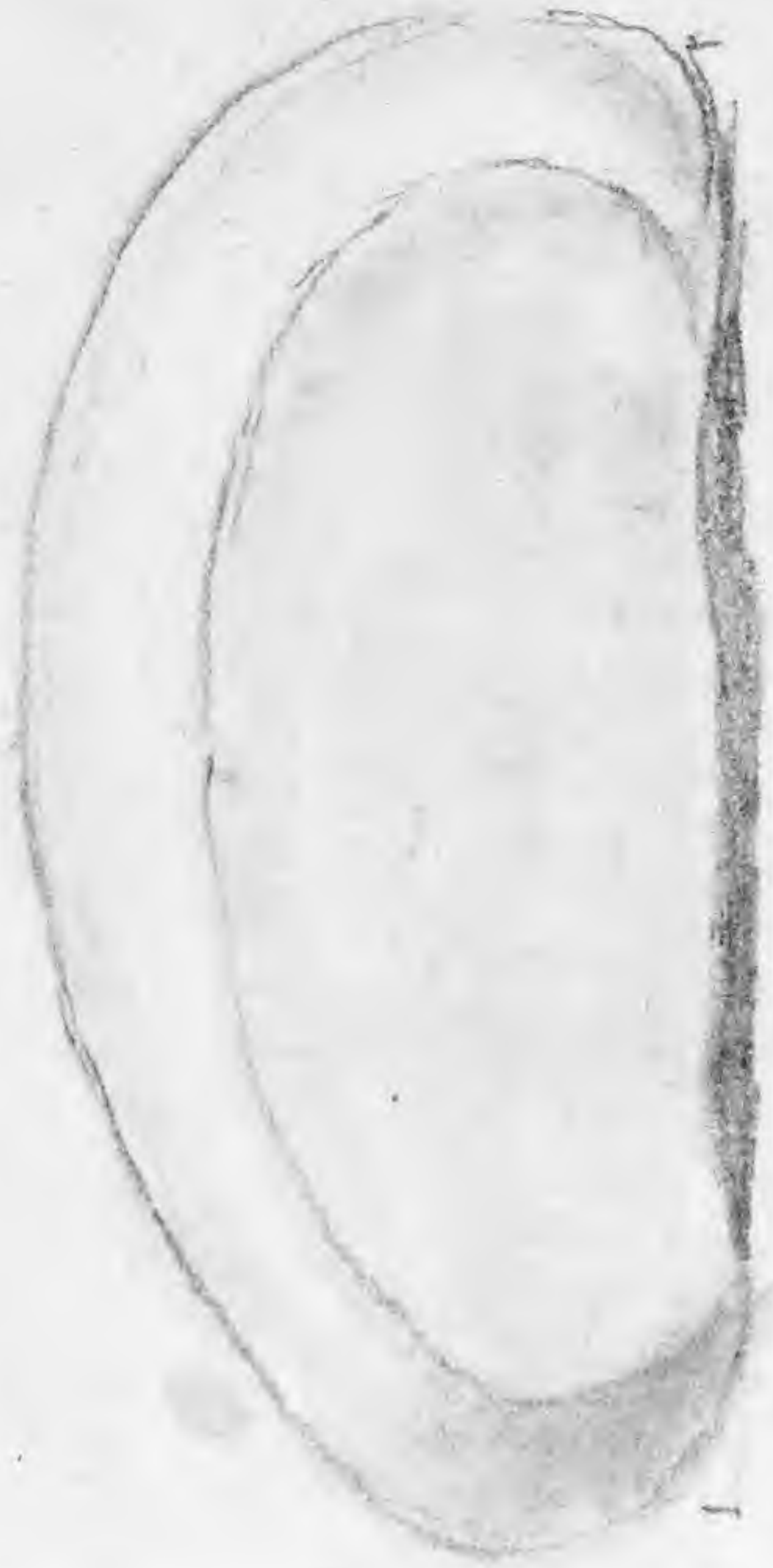


peduncle longer than usual — longest seen in this specimen



x150

$\frac{38 \times 41}{30} = 1.3 \times 1.4$ mm



inside of nut

930

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

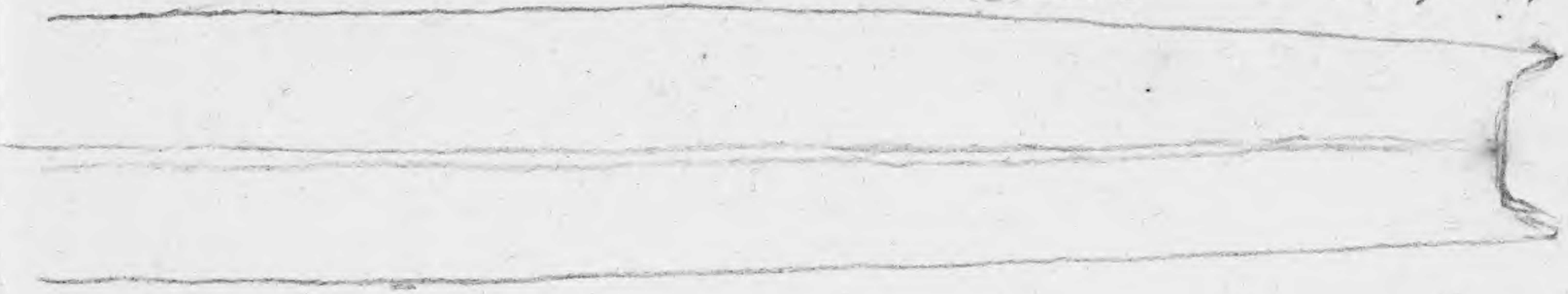
ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI
BOTANICAL
GARDEN

Callitriche hamulata ?
submersed form
sterile

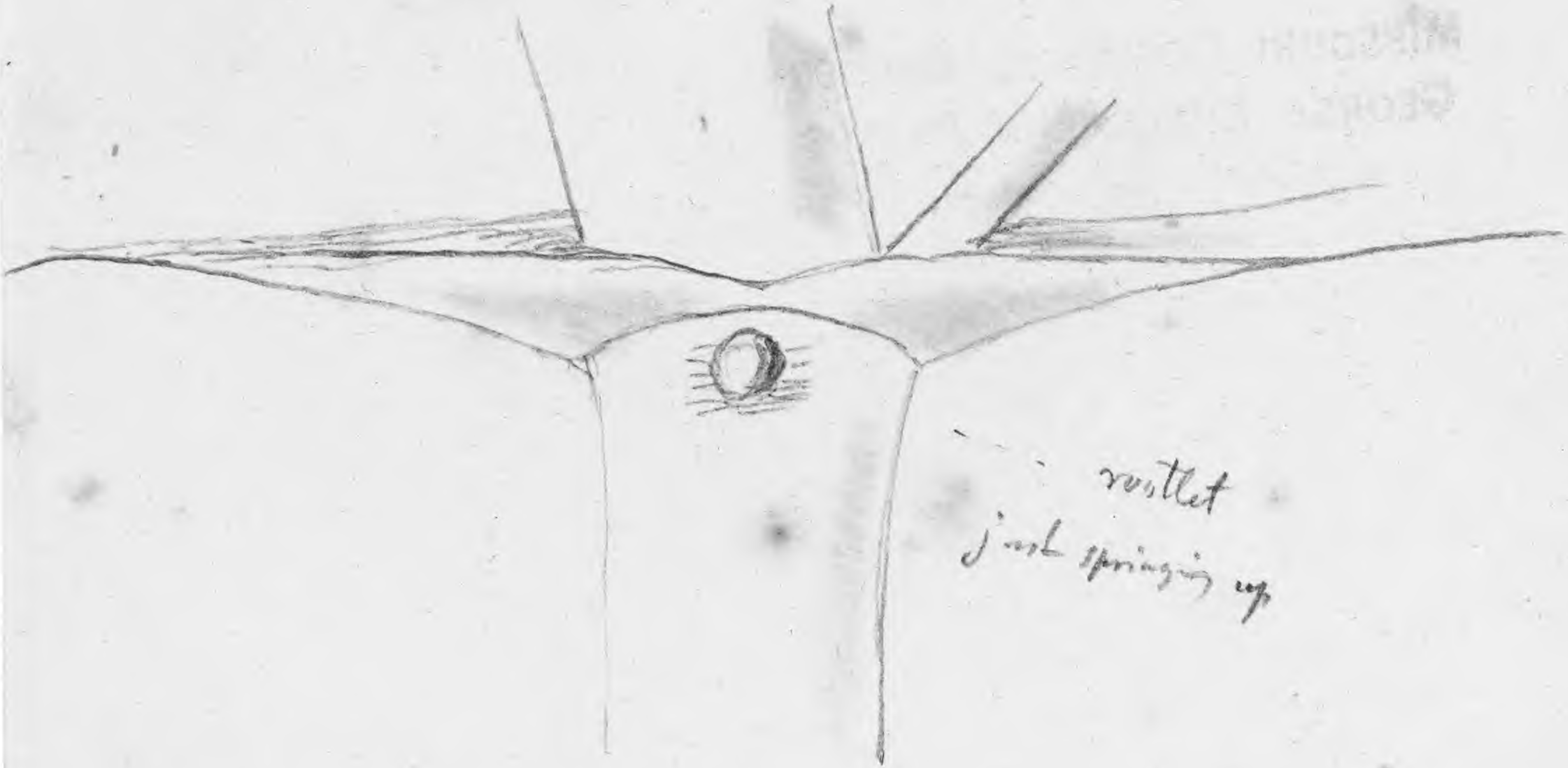
Nov 4th 1864

Angers, France
– H.C. Dunn



931

x 30



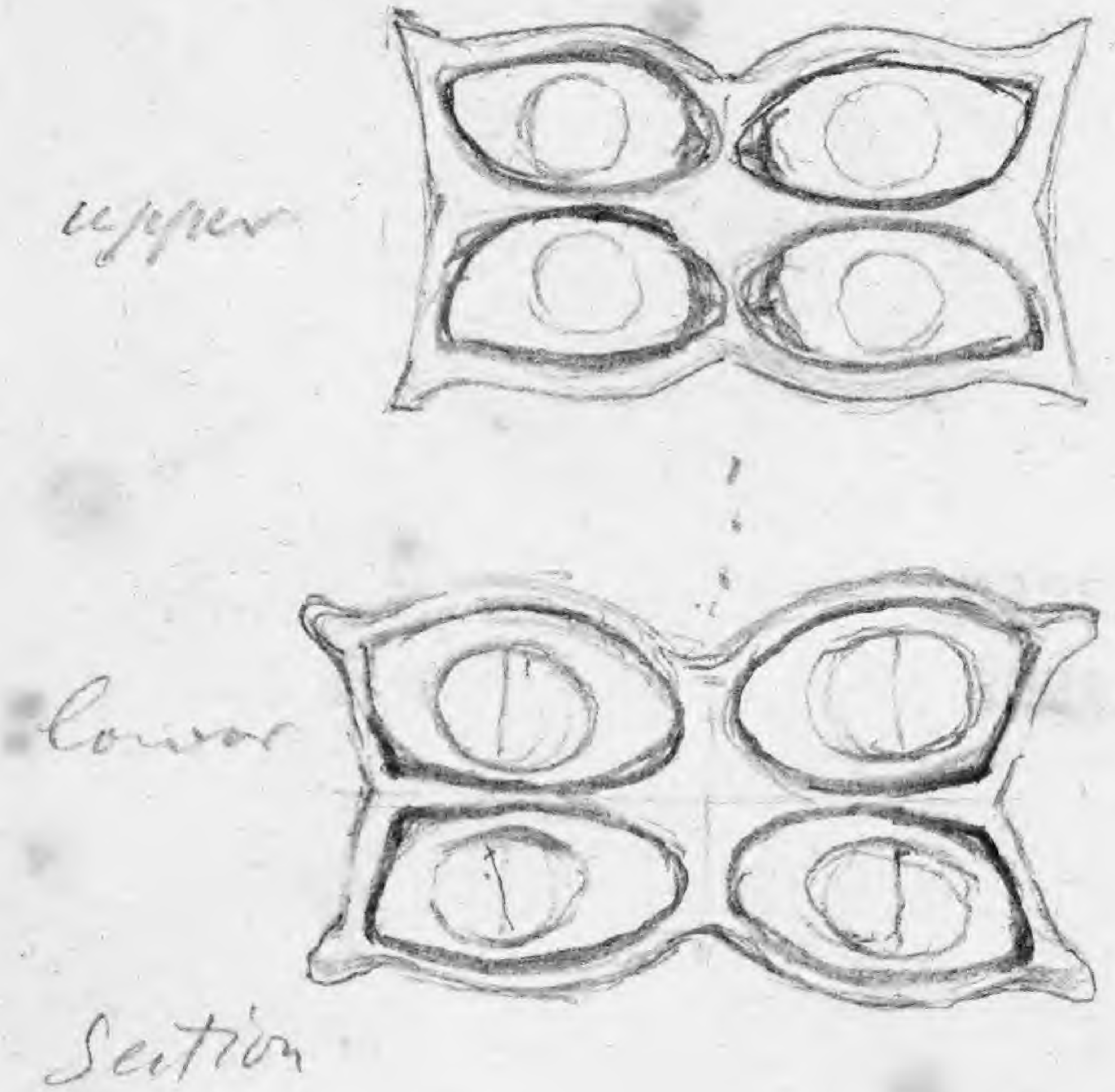
0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

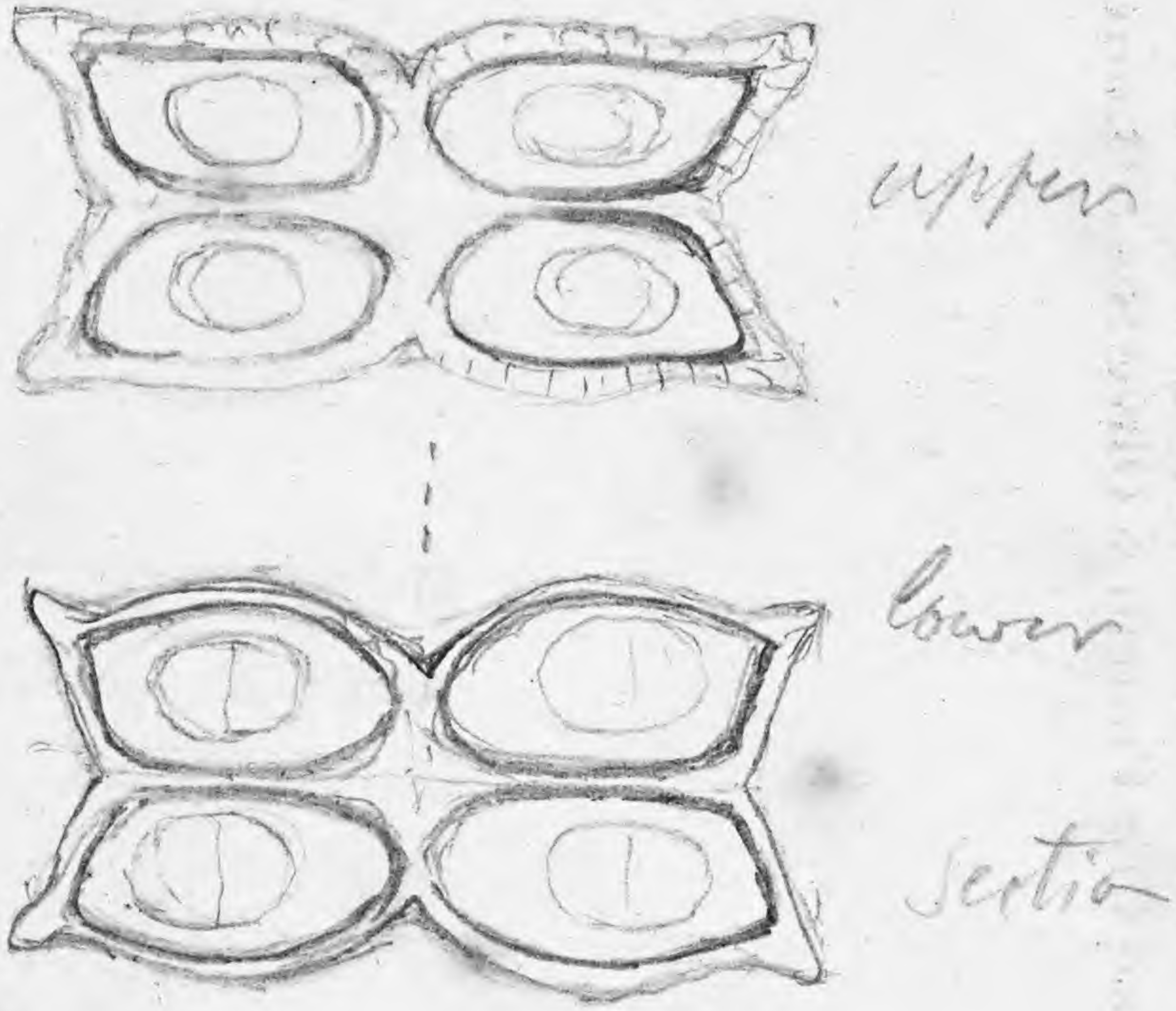
ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

"Callitr. pedunculata" Nov 5th 1864
Angers : Hb Durand

x 30





932

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI BOTANICAL GARDEN

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm copyright reserved
MISSOURI
BOTANICAL
GARDEN